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**WATER QUALITY DATA
FOR ONTARIO
LAKES AND STREAMS
1983**

VOLUME XIX

NORTHWESTERN REGION

MARCH 1989



**Environment
Ontario**

**Jim Bradley
Minister**

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Water Resources Branch

March 1989

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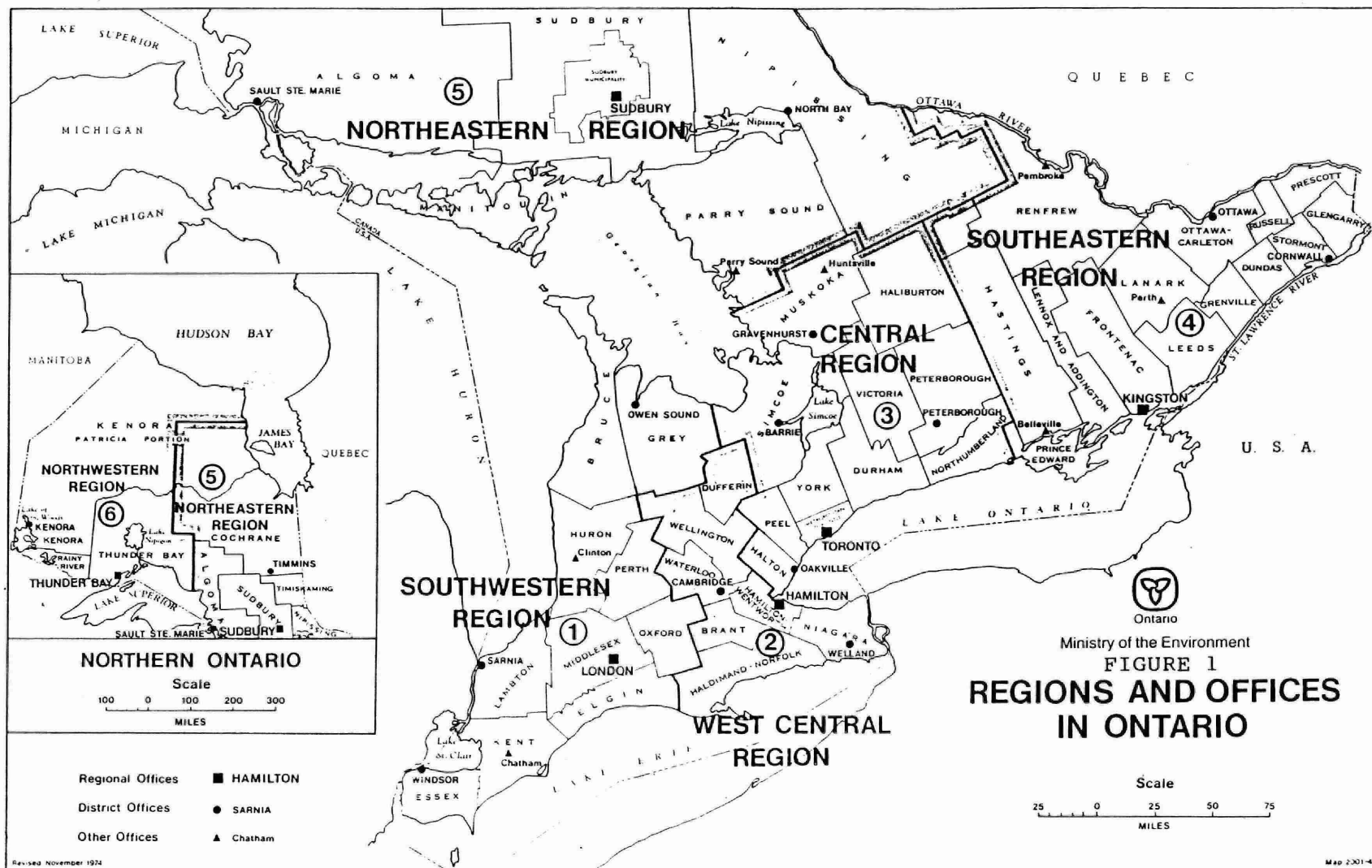
INTRODUCTION

"Water Quality Data Ontario Lakes and Streams, 1983, Volume XIX, Northwestern Region", is a revised version of the previously published series entitled "Water Quality Data for Ontario Lakes and Streams, 1981, Volume I-XVII". Published by the Water Resources Branch of the Ontario Ministry of the Environment. The data presented in this publication were collected by the Water Resources Assessment Units of this Ministry's six Regional Offices (Figure 1) with the assistance of local Conservation Authorities. Compilation and publication were performed by the River Systems Section of the Water Resources Branch. The data result from a routine sampling program designed to provide a long-term record of water quality information at specific points on rivers and inland lakes in Ontario.

Sampling station locations have been selected to meet one or more of the following requirements: (1) to measure quantitatively and qualitatively, the materials discharged from tributary streams to the terminal basins; (2) to monitor the effects of wastewater discharges on a watercourse; (3) to provide data that can be considered generally representative of water quality conditions in a certain area.

The information is used by the Ontario Ministry of the Environment to maintain surveillance over water quality and to provide supporting data used in the analysis and prediction of water quality for planning and other purposes. The data are also made available to any person or agency concerned with the quality of Ontario's rivers and lakes. The booklet "Water Management Goals, Policies, Objectives and Implementation Procedures of the Ministry of the Environment", 1978 (Revised May, 1984) outlines the current policies for water management in Ontario.

Samples are analysed for some or all of the following parameters: counts of total and fecal coliforms, enterococci, *Pseudomonas aeruginosa* and *escherichia* coliforms, concentrations of biochemical oxygen demand, total phosphorus, filtered reactive phosphate, filtered ammonia, total Kjeldahl nitrogen, filtered nitrite and nitrate forms of nitrogen; total suspended and dissolved solids; levels of conductivity and



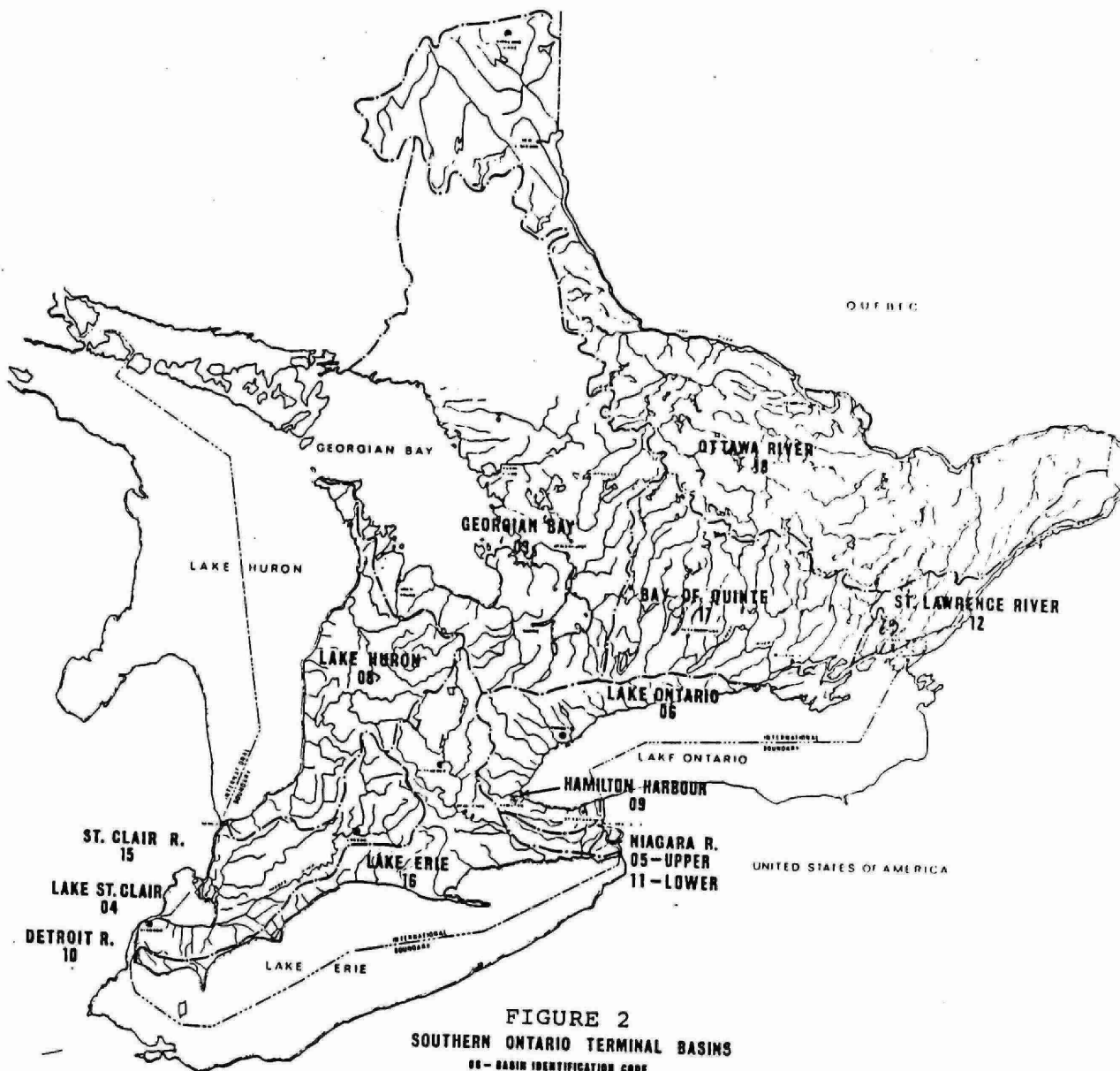
turbidity; concentrations of chlorides, sulphates, unfiltered reactive silicates, acidity, alkalinity; units of pH; concentrations of total iron, phenols, hardness, calcium, magnesium; units of colour; concentrations of potassium, sodium, total organic carbon, chemical oxygen demand, solvent extractables, arsenic, mercury, aluminium, chromium, copper, lead, cadmium, zinc, manganese, nickel, fluoride, cyanide and cobalt.

In addition, radiochemical analyses are conducted on selected samples and the results are expressed as levels of ionizing radiation (i.e. the number of nuclear disintegrations per second). Selected samples are analysed for some or all of the following radiochemical parameters: gross alpha, gross beta, radium-226, total uranium, cesium-137, cesium-134, cobalt-60, tritium and iodine 131.

Some samples are also analysed for some or all of the following synthetic organic parameters: concentrations of PCB, PCP and 2,4,5-T.

The water quality monitoring program commenced in July 1964 in Southern Ontario and currently consists of a total of 780 stations throughout Ontario. The following maps (figures 2 and 3) show the Southern and Northern Ontario Terminal Basins which are used to identify the sampling station locations. Definitions or brief descriptions are provided for the more common parameters of pollution under the section entitled Interpretation of Data.

Other water quality monitoring programs such as the Fish Contaminant Monitoring Program which is co-ordinated by the Ontario Ministries of Natural Resources, Environment and Labour are not discussed in this publication. A summary of health implications of contaminants in fish with a listing of test results from each fish sampling location can be found in the Ministry publication, "Guide to Eating Ontario Sport Fish." This publication is updated annually and is available free of charge, Ministry of the Environment, Water Resources Branch, 135 St. Clair Avenue West, Toronto, Ontario, M4V 1P5, telephone (416) 323-4994.



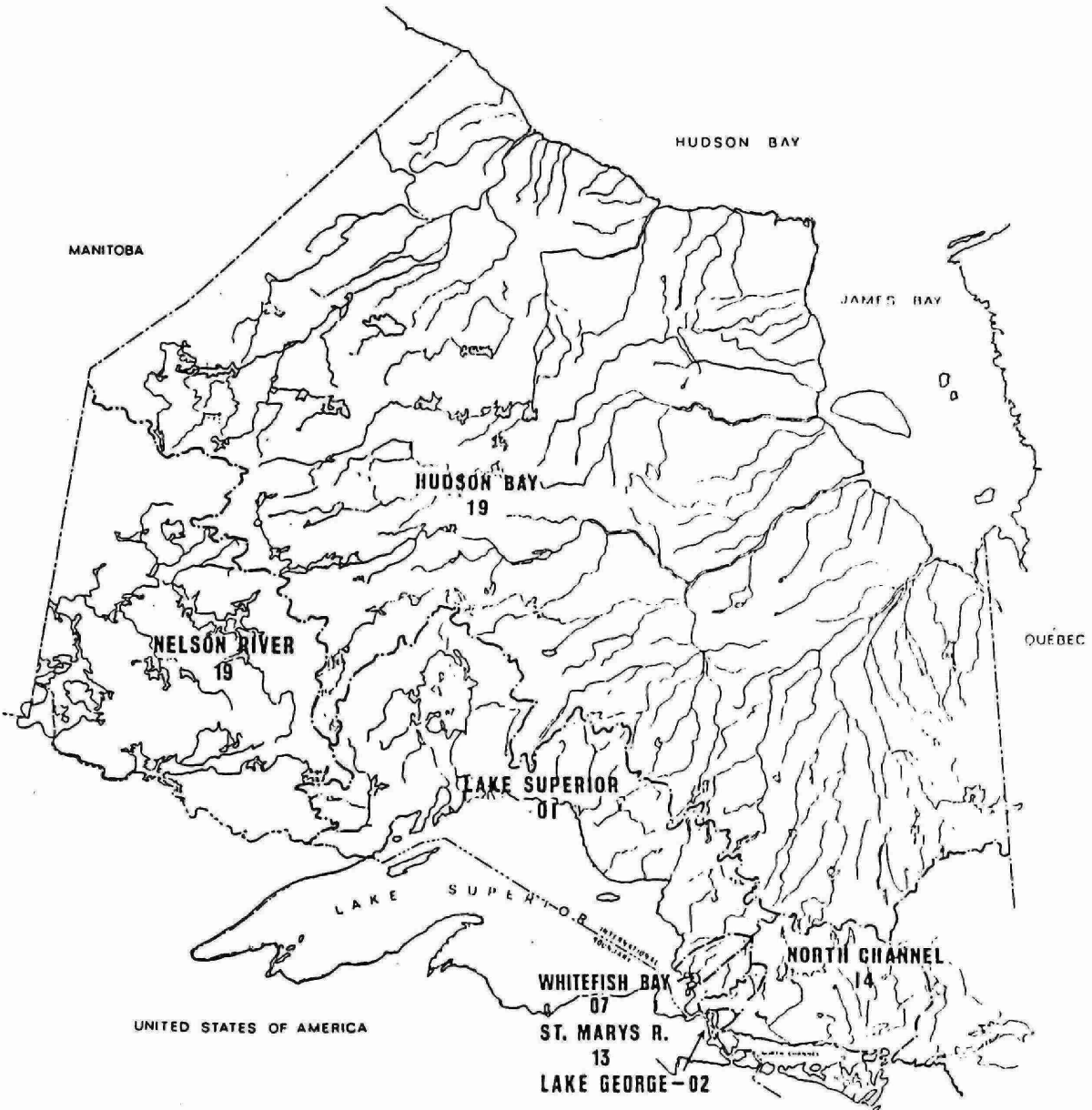


FIGURE 3
NORTHERN ONTARIO TERMINAL BASINS
19 - BASIN IDENTIFICATION CODE

The streamflow station network in Ontario is not discussed in this publication. Whenever streamflow data exists at tributary locations which are coincident with the water quality monitoring station locations, mean daily discharges is reported along with the water quality data. The collection of hydrometric data in Ontario has been carried out under a Memorandum of Agreement between the Government of Canada and the Province of Ontario since April, 1975. The Province of Ontario is represented in the Agreement by the Ministry of the Environment, the Ministry of Natural Resources and Ontario Hydro. These agencies meet at regular intervals with the Water Survey of Canada to administer the Agreement. Streamflow data for Ontario are published annually as surface water data by the Federal Government.

NETWORK MAP SHEETS

Individual station locations are identified on specially prepared network maps. These network maps have been drawn to conform approximately to the boundaries of the Ministry's Regions, and are grouped according to Regions. Two index maps (Figures 4 and 5) illustrate individual map sheet coverages within the Province.

The following procedures was used in the preparation of the maps. Individual base maps within a Region were assembled using the National Topographic Series maps at a scale of 1:250,000. In northern Ontario, this was reduced to a scale of 1:500,000 in the Lake Superior and Nelson River basins, and to a scale of 1:2,000,000 in the Hudson Bay basin. For each base map, an overlay of the river systems was prepared, showing major watershed and Ministry of the Environment Regional boundaries. Numeric terminal basin and stream codes were added, and active water quality monitoring stations were located on each overlay and referenced with station numbers. The overlays were then reduced to approximately 40% of their original size for purposes of this publication.

The previously-mentioned terminal basin and stream code, when combined in sequence with a given station number, form a unique station identifier which appears as the "Station ID". The "Station ID" is listed for all active monitoring stations in the "Sampling Station Directory", an alphabetical listing of terminal streams monitored in Northwestern Region (See Sampling Station Directory).

The location of stations in the Northwestern Region are shown in figures 6, 7, 8, 9, 10, 11 and 12. The locations of the other stations in the other regions and in other parts of Ontario such as those located on the Great Lakes or those operated by the Water Quality Branch, Ontario Region, Environment Canada, are not included.

INTERPRETATION OF DATA

The definition of the parameters measured in the Provincial Water Quality Monitoring Program are listed in the following pages. The significance of each measurement in regard to specific water uses can be determined by referring to the booklet "Water Management, Goals, Policies, Objectives and Implementation Procedures of the Ministry of the Environment, November, 1978". (Revised, May 1984)

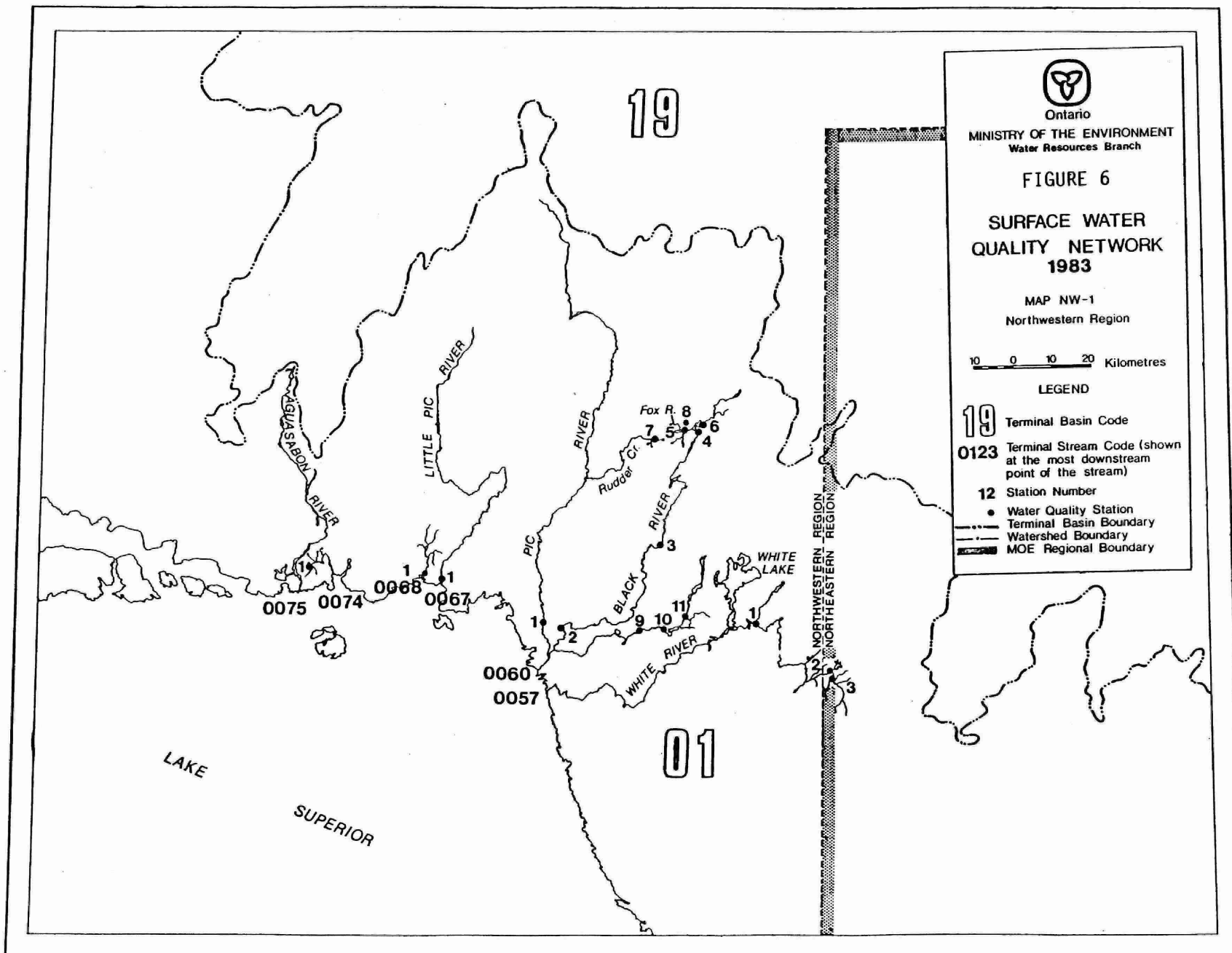
A. ANALYSES AND MEASUREMENTS CONDUCTED AT THE SAMPLING SITE

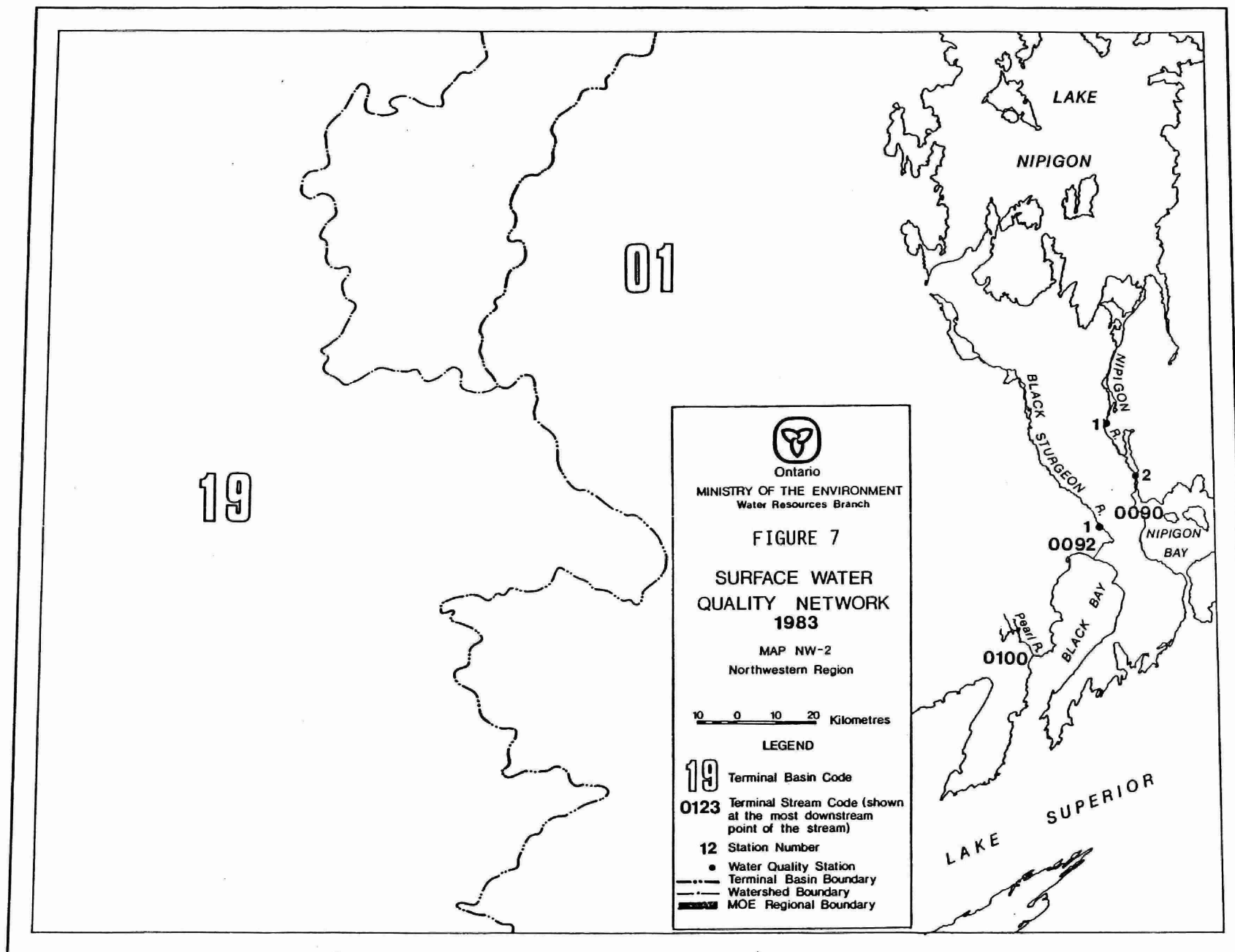
Stream Condition

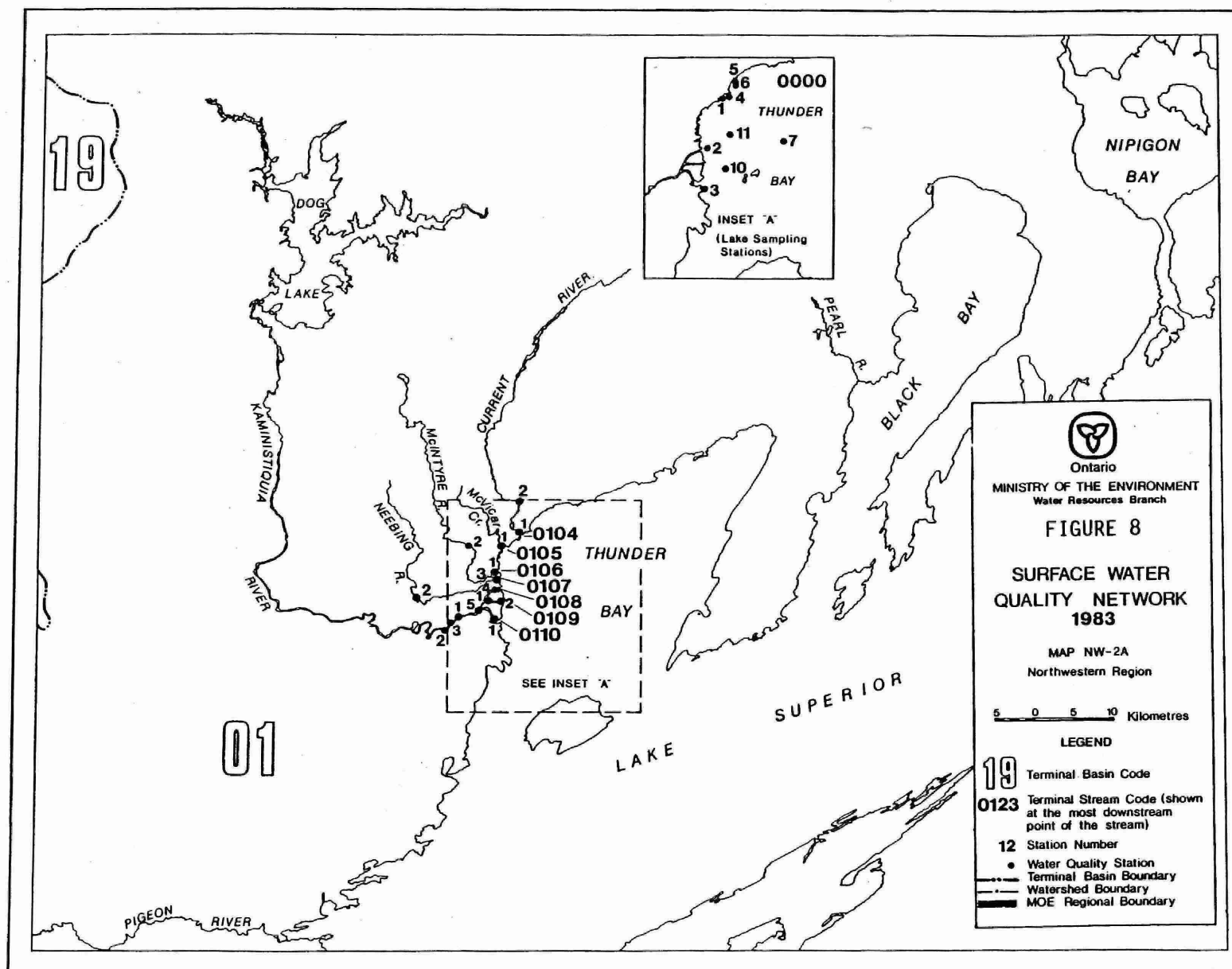
The physical condition of the body of water is described from an on-site examination at the time of sampling and is represented by a one-digit number from one to zero as follows:

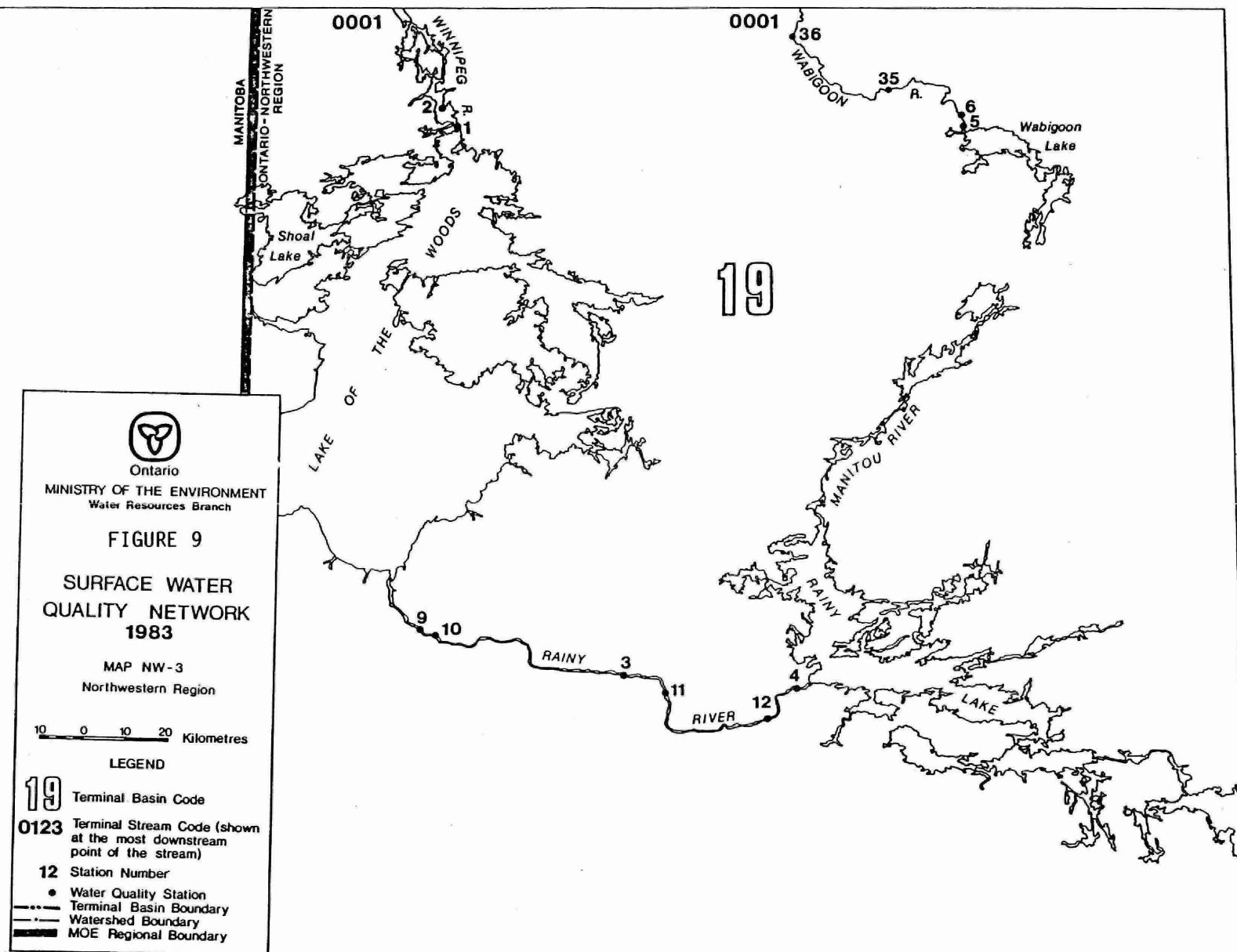
1. Stream dry
2. Frozen to stream bed
3. Stream in flood condition
4. Sampled through ice













Ontario

MINISTRY OF THE ENVIRONMENT
Water Resources Branch

FIGURE 10

SURFACE WATER QUALITY NETWORK 1983

MAP NW-4
Northwestern Region

10 0 10 20 Kilometres

LEGEND

19

Terminal Basin Code

0123

Terminal Stream Code (shown
at the most downstream
point of the stream)

12

Station Number



Water Quality Station



Terminal Basin Boundary

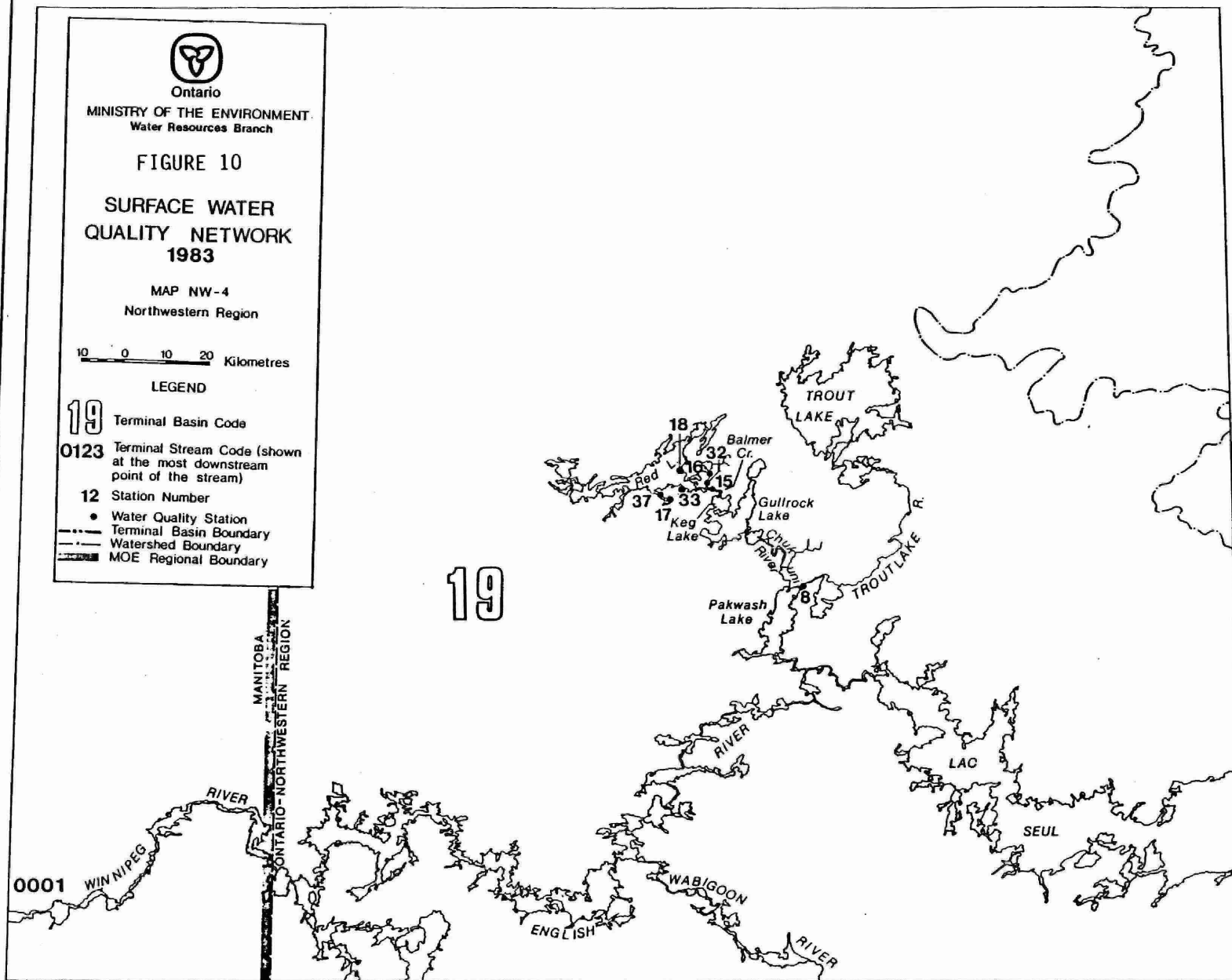


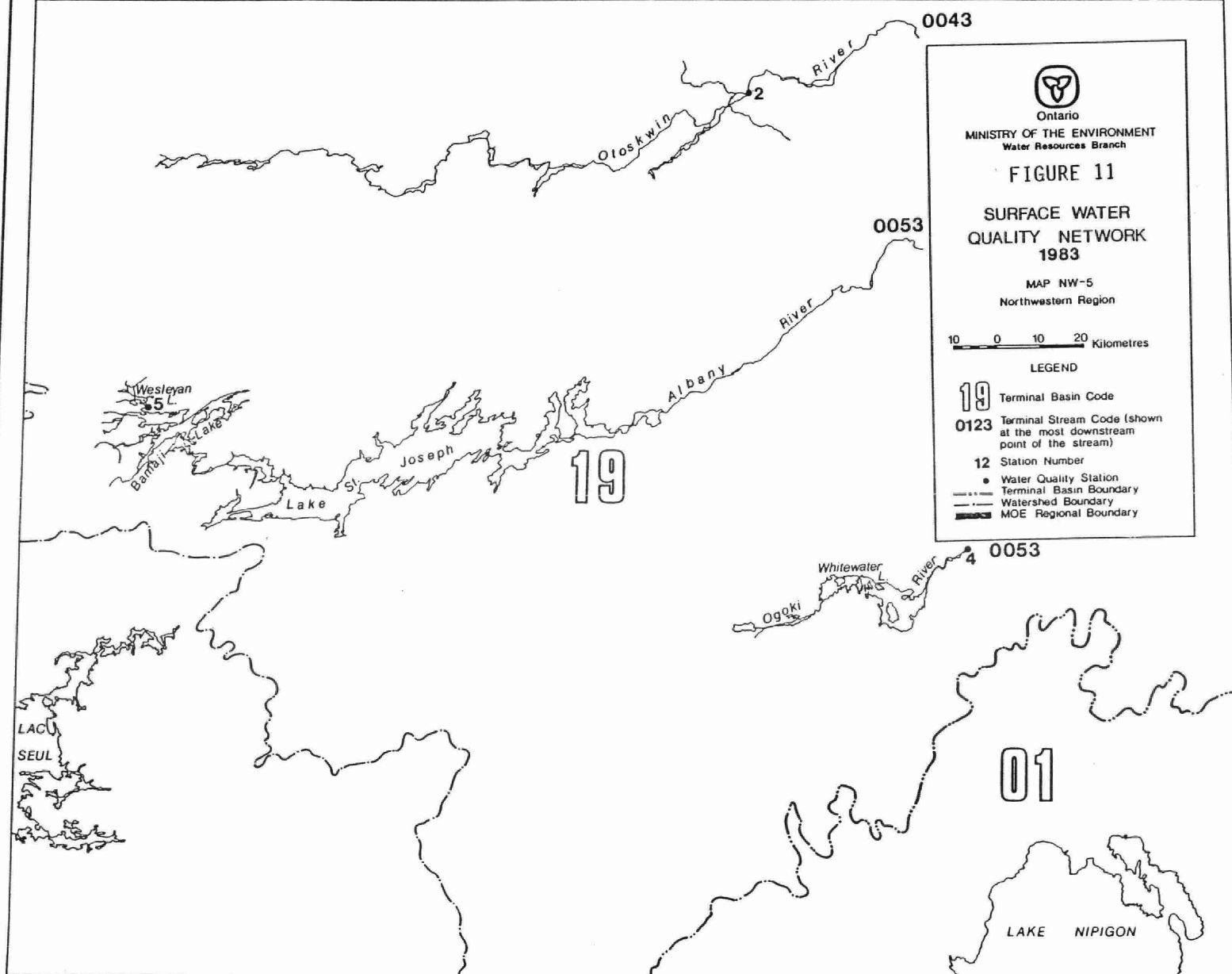
Watershed Boundary



MOE Regional Boundary

19





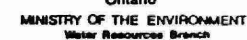
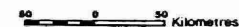


FIGURE 12

**SURFACE WATER
QUALITY NETWORK
1983**

MAP NW-6

Northwestern Region



LEGEND

19 Terminal Basin Code

0123 Terminal Stream Code (shown at the most downstream point of the stream)

12 Station Number

- Water Quality Station
- Terminal Basin Boundary
- Watershed Boundary
- MOE Regional Boundary

5. Suspended algae
6. No apparent algae
7. Profuse weed growth
8. Normal
9. Oil scum or floating matter
10. Objectionable odours

Under some circumstances a combination of up to three of the above conditions may be shown for a given sample at an individual station.

Streamflow

Streamflow information at or near a water quality monitoring site is an important factor when interpreting and employing water quality data. The product of streamflow and concentration defines the mass of material passing a point. Streamflow is also a useful reference when comparing water quality data for different periods of the year (e.g. spring flood vs summer drought).

Flows in many of the streams sampled are measured by the Water Survey of Canada, Inland Waters Directorate, Environment Canada.

Temperature

Water temperature is an important factor when a number of water quality parameters are being evaluated. Temperature directly affects the solubility of gases (e.g. dissolved oxygen) and significantly affects biological and chemical reaction rates.

Temperature is measured at the sampling site with an electronic thermistor or a mercury thermometer.

Dissolved Oxygen

Dissolved oxygen in water originates directly from the atmosphere or through photosynthesis in aquatic plants. Ample dissolved oxygen is necessary to maintain satisfactory conditions for fish and other biological life in water. Organic wastes and some inorganic materials exert, upon decomposition, an oxygen demand which may deplete the dissolved oxygen below levels required by aquatic life.

Dissolved oxygen is measured at the sampling site with an electronic meter or by a chemical titration.

B. ANALYSES AND MEASUREMENTS CONDUCTED AT THE LABORATORY

1. MICROBIOLOGICAL ANALYSES

Total Coliform

The Membrane Filter (MF) technique is used to obtain an approximation of the concentration of total coliform organisms. These organisms are normal inhabitants of soils and the intestines of man and other warm-blooded animals. They are always present in large numbers in sewage and fecal matter, and are often found in watercourses adjacent to industrial, agricultural and other pollution sources.

Results are reported as MF count per 100 mL of sample.

Background Count

The background count estimates the number of organisms, other than coliforms, that occur in the total coliform analysis of a sample. The results are used in the interpretation of total coliform counts. High background counts are generally indicative of poor water quality.

Fecal Coliform and Fecal Streptococcus (Enterococcus) Organisms

Fecal coliform and Enterococcus organisms are generally found in the alimentary tract of warm-blooded animals. They are indicative of sanitary waste intrusion and/or fecal contamination from warm-blooded animals.

Pseudomonas aeruginosa

Pseudomonas aeruginosa, are pathogens found in sewage, that can be readily isolated. These organisms are sometimes found in bathing waters and are the major pathological agent in otitis externa (ear aches) and other skin infections.

Escherichia Coliform (E. Coli)

E. Coli is the predominant, facultative bacterial species in the large bowel and is thus the coliform most directly related to fecal pollution. E. Coli is occasionally pathogenic to man (e.g. urinary tract infections) but is primarily an indicator organism in water bacteriology.

2. CHEMICAL AND PHYSICAL ANALYSES

Biochemical Oxygen Demand (BOD)

In itself, BOD is not a pollutant and presents no direct harm to the aquatic environment. It is, however, a measure of the unstable organic matter present in water which, through aerobic decomposition, oxidizes to a stable inorganic form utilizing the oxygen resources of a watercourse. The level of BOD is an important parameter in assessing the potential concentrations of dissolved oxygen in water.

Five-day biochemical oxygen demand (BOD₅) is a laboratory measurement of the amount of oxygen consumed in a sample incubated for five days at 20°C.

Total Phosphorus

Phosphorus is a primary nutrient for plant and animal life and like nitrogen passes through cycles of decomposition and photosynthesis. This element is commonly found in nature in the form of inorganic phosphates and organically bound phosphorus. Total phosphorus includes orthophosphate, condensed phosphates and organically bound phosphorus in both the dissolved and particulate form. Untreated or treated sewage, some industrial wastes and agricultural and urban drainage contain significant concentrations of phosphorus.

Although there is no firm criterion for phosphorus, it is generally considered that to eliminate excessive plant growths in rivers and streams, total phosphorus should not exceed 0.03 mg/L. To avoid nuisance concentrations of algae in lakes, average total phosphorus concentrations for the ice free period should not exceed 0.02 mg/L.

Filtered Reactive Phosphate

Filtered reactive phosphate is that phosphorus which passes through a 1-2 micrometre filter and responds to a colorimetric orthophosphate determination. It is a combination of simple orthophosphate and readily hydrolyzed phosphate primarily in the dissolved form.

Filtered reactive phosphate is generally considered to be readily available for aquatic plant growth.

Filtered Ammonia Nitrogen

Filtered ammonia nitrogen (ammonia NH_3 and ammonium NH_4^+) is the soluble product in the anaerobic decomposition of nitrogenous organic matter. It is also formed when nitrites and nitrates are reduced either biologically or chemically. Small amounts of ammonia nitrogen may be taken out of the atmosphere by rain water.

River which are considered unpolluted generally have filtered ammonia levels of less than 0.1 mg/L.

Total Kjeldahl Nitrogen

Total Kjeldahl nitrogen is a measure of the total nitrogenous matter present, excluding nitrate and nitrite. The total Kjeldahl nitrogen concentration, less the ammonia nitrogen concentration, gives a measure of the organic nitrogen present.

Ammonia and organic nitrogen are important in assessing the availability of nitrogen for biochemical utilization. In unpolluted rivers, the normal range for total Kjeldahl nitrogen is 0.1 to 0.5 mg/L.

Filtered Nitrite

Nitrite is an intermediate oxidation product of ammonia and also an intermediate form in the denitrification process from nitrate to nitrogen gas. The significance of nitrites, therefore, varies with their amount, source and relation to other constituents of samples (notably the relative magnitude of ammonia and nitrate present).

Since nitrite is rapidly and easily converted to nitrate, its presence in concentrations greater than a few micrograms per litre is generally indicative of active biological processes in the water.

Filtered Nitrate

Nitrate is the end product of the stabilization of organic nitrogen which occurs primarily through aerobic biochemical processes. Nitrate is usually found in polluted waters that have undergone some degree of self-purification. Nitrates can also occur in watercourses intercepting drainage from fertilized agricultural areas.

Nitrogen in the form of nitrate is readily utilized by aquatic plants and algae. In unpolluted rivers, the nitrate nitrogen concentration is generally less than 0.5 mg/L.

Inorganic Nitrogen

Inorganic nitrogen is a calculated value and represents the sum of the concentrations of filtered ammonia nitrogen and filtered (nitrate plus nitrite) nitrogen.

Organic Nitrogen

Organic nitrogen is a calculated value and represents the difference between the concentrations of total Kjeldahl nitrogen and filtered ammonia nitrogen.

Total Nitrogen

Total nitrogen is a calculated value and represents the sum of the concentrations of total Kjeldahl nitrogen and filtered (nitrate plus nitrite) nitrogen. Nitrogen is a common constituent of decomposition products, treated sewage, fertilizers and industrial discharges. Nitrogen compounds are present in most plant and animal materials.

Solids

Total, suspended and dissolved solids are presented as separate parameters in this report. The solids analyses are gross measurements of the amounts of particulate matter and dissolved materials found in water. Solids enter the watercourse from virtually every source, the most familiar being sewage treatment plant effluents, municipal storm drainage, industrial discharges and erosion.

Solids significantly affect water uses. Highly turbid water is undesirable for municipal and industrial supply, fish and aquatic life, recreation and aesthetics. Suspended solids can also transport significant quantities of organic and inorganic trace contaminants.

Conductivity

The conductivity test provides a measure of the electrolytic properties of water. The presence of dissolved ions (in solution) such as chlorides, sulphates and calcium, renders water conductive.

Conductance, the reciprocal of resistance, is recorded in the unit mho and in order to avoid inconvenient decimals, data are reported in micromhos per cubic centimetre. In many waters there is a direct linear relationship between dissolved solids concentrations and conductivity.

Conductivity serves as a control parameter and is an excellent indicator of water-quality changes since it is relatively sensitive to variations in dissolved-solids concentrations.

Turbidity

The turbidity of water is attributable to suspended and colloidal matter such as micro-organisms, detritus, clay and other mineral substances which reduce clarity and diminish the penetration of light.

Turbidity is undesirable in surface waters used for domestic and industrial supply and for recreation. Often some of the suspended matter has to be removed to prevent interference with disinfection processes and abrasion to equipment. By interfering with the penetration of light, turbidity can seriously affect aquatic biological communities.

Chlorides

Chlorides are found in practically all natural waters. They may be of natural mineral origin but in general the largest contributions can be traced to domestic sewage discharge, municipal storm drainage, road salting, and industrial wastes.

While not harmful to health in moderate quantities, high concentrations of chlorides make water unfit for municipal and industrial supplies and livestock watering. In addition to imparting an objectionable taste to water, high chloride levels are responsible for increased corrosiveness of water. Furthermore, chloride, being toxic to many plants, may render water undesirable for irrigation.

Sulphate

Sulphates may occur naturally in waters and may be contained in industrial wastes. They are produced from the final oxidation stage of sulphides, sulphites and thiosulphates. Sulphates, under anaerobic conditions, can be reduced to hydrogen sulphide which is malodorous (the odour of rotten eggs) and highly corrosive.

High concentrations (between 150 and 500 mg/L) in drinking water may be cathartic to humans.

Sulphide

Sulphide is formed by bacterial reduction of sulphate and organic sulphur compounds under anaerobic conditions. It is therefore, commonly found in domestic wastewater, industrial wastewater, sludges, hypolimnions of stratified lakes and any other aquatic systems where anaerobic conditions prevail. As a result, concentrations in surface waters are negligible.

Sulphide is an important parameter in waste treatment monitoring. Oxidation of sulphide to sulphuric acid in concrete sewer pipes leads to "crown corrosion". Soluble sulphides in excess of 200 mg/L are toxic to bacteria and will inhibit sludge digestion.

Unfiltered Reactive Silicate

Silicon occurs in sand or quartz as silica and as silicates in feldspar, kaolinite and other minerals. Silicon dioxide, or silica, is insoluble in waters or acids, except hydrofluoric acid, but it may occur in natural waters as finely divided or colloidal suspended matter. Silica is widely employed in industry for making glass, silicates, ceramics, abrasives, enamels, petroleum products, etc.

In concentrations found in natural and treated waters, silica or silicates have no adverse physiological effects. Silicates are essential to the growth of many aquatic organisms.

The data which appear under the heading "Reactive Silicate" should properly be referred to as "Unfiltered Reactive Silicate" and are reported as Silicon (Si). Data in this series of publications prior to 1975 were reported as Silica (SiO_2).

Acidity

Acidity in surface or ground waters may be attributable to natural causes, such as humic acids extracted from swamps or peat beds, or industrial wastes such as pickling liquors, effluent from the manufacture of explosives, acid mine drainage or sulphite waste liquors. It may also be affected by atmospheric inputs.

Acidity is best interpreted in conjunction with the pH and alkalinity, as well as any other analyses which identify the acidic components of water.

Alkalinity

Alkalinity is a measure of a water's capacity to neutralize an acid. The alkalinity of natural waters is caused by three major classes of materials which may be ranked in order of their effect on pH as follows:

1. Hydroxides (rarely present in Ontario)
2. Carbonates
3. Bicarbonates and other salts of weak acids

The alkalinity of water has little sanitary significance but is of importance in water and waste treatment practices. Waters with high alkalinity are undesirable because of their associated excessive hardness.

pH

The symbol pH is used to designate the logarithm (base 10) of the reciprocal of the hydrogen-ion concentration. It is an index of the acidity or alkalinity of the solution. The practical pH range extends from 0, very acidic, to 14, very alkaline, with the middle value of pH 7 corresponding to exact neutrality at 25°C.

The pH is important in determining the treatment of water supplies.

Iron

Iron is one of the most abundant elements in the earth's crust and it is a constituent of many industrial wastes.

When sufficient iron is added to water in the form of salts (chlorides, nitrates, sulphates), ferrous to ferric precipitates (iron hydroxides) tend to form, causing low pH values which are toxic to aquatic life. Iron in water may also result in the growth of iron bacteria causing unpalatable tastes, discolouration of cloths and plumbing fixtures, and the formation of scales in water mains.

Phenols

The phenolic compounds, collectively referred to as phenols, are those hydroxyl derivatives of benzene or its condensed nuclei, which are determined by the 4-amino antipyrine method. The results are reported from many industrial processes and may also be released from aquatic plants and decaying vegetation.

Depending on the concentration, the presence of phenolic compounds may be toxic to fish, and may taint the flesh of fish. Phenols in very minute concentrations will combine with chlorine to produce tastes and odours which are usually described as medicinal or chemical.

Hardness

Water hardness relates to a water's capability to produce lather from soap. The higher the hardness, the less lather will be formed.

Hardness in water is caused by dissolved divalent metal ions, calcium and magnesium being the most common. Natural hardness occurs most frequently in limestone areas. The limestone is dissolved by contact with ground and surface water and releases calcium ions and traces of contaminant metals.

Hard water, though not considered a health hazard, is undesirable for industrial and domestic water supplies because it has a number of detrimental effects, the most common being the formation of scale in boilers, pipes and water heaters; excessive soap consumption in home and commercial laundering; and adverse affects in textile, plating and canning industries.

Results appear under either the heading "Hardness" and "Calculated Hardness", depending on the analytical procedure. The former results are obtained through titration with ethylenedi-aminetetra- acetic acid (EDTA), the latter by calculation from magnesium (Mg) and calcium (Ca) results determined by Atomic Absorption Spectrophotometry (AAS).

Calcium

Calcium is relatively abundant in the earth's crust and readily soluble in water so that calcium salts and calcium ions are among the most commonly encountered substances in water. They may result from the leaching of soil and may be contained in sewage and industrial wastes.

Excessive calcium and magnesium in drinking water have been implicated as factors predisposing to the formation of concretions in the body, such as kidney, or bladder stones. On the other hand, there is also evidence of adverse physiological effects from an insufficiency of calcium in water. The calcium ion is a major contributor to hardness and is often responsible for boiler scale deposits on cooking utensils

and excessive soap requirements in washing and laundering. Where water is used for irrigation, calcium is beneficial to plant growth.

Magnesium

Magnesium is an abundant element and a common constituent of natural waters. Magnesium ranks with calcium as a major cause of hardness. The effects of magnesium of water used for consumption and irrigation are generally the same as those of calcium. Magnesium is considered relatively non-toxic to man and not a public health hazard because before toxic concentrations are reached in water, the taste becomes quite unpleasant.

Colour

Colour in water may be of natural mineral or vegetable origin caused by metallic substances such as iron and manganese compounds, humus material, peat, tannins, algae, weeds, and protozoa. Waters may also be coloured by inorganic or organic soluble wastes from industries, such as steelworks, mining, refining, pulp and paper, chemicals, and others. Returned irrigation water also contributes to colour.

Colour from natural origin is not considered harmful from a health standpoint. However, in domestic water, colour is undesirable from aesthetic considerations.

Potassium

Potassium occurs in many minerals and potassium salts exist in natural waters as a result of contact with potassium-bearing soils and the introduction of certain industrial wastes. The common salts of potassium are highly soluble in water. They resist separation from water by natural processes other than evaporation.

In limited concentrations, potassium is an essential nutrient. Excessive amounts of certain potassium salts in drinking water have detrimental effects on human digestive and nervous systems.

Sodium

Sodium salts are common to all natural waters and may be present in high concentrations in wash waters softened by exchanging calcium and magnesium ions for sodium. Sodium is also found in many industrial process effluents, domestic wastes and salts used in road de-icing.

The presence of sodium salts in drinking water may present a health hazard to a person with circulatory, renal and cardiac problems and may cause digestive problems in animals and otherwise healthy human beings. Concentration of salts such as sodium chloride impact objectionable tastes and may render water unpalatable.

Total Organic Carbon (TOC)

Total organic carbon (TOC), the most significant carbon measurement from a water-quality assessment viewpoint, is the arithmetic difference between total carbon (TC) and total inorganic carbon (TIC).

Total organic carbon usually has a direct relationship with Biochemical Oxygen Demand (BOD) and Chemical Oxygen Demand (COD) values, but the relationship varies with the composition of the organic material present. The carbon tests are rapid and suitable for the evaluation of organic pollution levels, assessment of waste treatment efficiencies and to a limited extent, the potential demand of a waste discharge on the oxygen resources of a water body.

Dissolved Organic Carbon (DOC)

The organic content of lakes and rivers depends primarily on the products of plants and animals which those water bodies support. Most of the organic carbon in water is composed of humic substances and partly degraded plant and animal materials, some of which is resistant to microbial degradation. Runoff from agricultural land and industrial discharge from industries such as pulp and paper will add organic carbon to the water. The degradation of large amounts of organic matter causes depletion of the dissolved oxygen concentration and hence, organic carbon is also measured on sewage and industrial waste samples. In natural waters, the organic carbon content will usually be less than 30 mg/L.

Chemical Oxygen Demand (COD)

The chemical oxygen demand is used in measuring the strength of sewage and industrial wastes. The major advantage of this test is that laboratory results can be obtained in about three hours compared to five days for the five-day biochemical oxygen demand test. The chief limitation of the COD analysis is its inability to differentiate between biologically oxidizable and biologically inert organic matter. The COD almost always exceeds the biochemical oxygen demand.

Solvent Extractables

The solvent extractable test measures the total quantity of substances present in a water sample that is readily soluble in an appropriate organic solvent. Such substances include fatty acids, petroleum products, oils, greases and resins. They are generally found in effluents of oil refineries, meat packing plants, slaughter houses, dairies, canneries, and a variety of other industries.

Solvent soluble materials greatly increase the oxygen depletion rate in receiving waters and will hinder oxygen exchange with the atmosphere by forming slicks.

Arsenic

Arsenic may occur, naturally, to a small extent, mostly as sulphides and as arsenides of metals. Elemental arsenic is insoluble in water but many of the arsenates are highly soluble. Highest levels of arsenic in Ontario are found in watercourses downstream of wastewater discharges from metal smelting operations.

Arsenic is very toxic to humans and the trivalent forms are largely retained in the body tissues. Low concentrations of arsenic stimulate plant growth but higher concentrations destroy chlorophyll in the foliage.

Mercury

Mercury may occur naturally as a free metal or as mercuric salts, the most common being cinnabar, HgS. Both elemental mercury and HgS are insoluble in water and are not likely to occur as water pollutants. Many synthetic organic salts of mercury are used commercially and these salts are highly soluble in water.

Mercury is cumulative and toxic to humans and can be concentrated and transferred up the food chain to a point where commercial and game fish may become unsuitable for human consumption. Micro-organisms can methylate inorganic mercury under both aerobic and anaerobic conditions to produce a more toxic substance.

Aluminium

Aluminium occurs in many rocks and ores but never as a pure metal in nature. In streams, the presence of aluminium ions may result from industrial wastes or more likely from wash water from water treatment plants.

Aluminium in a public water supply is not considered a public health problem, since no evidence has been found to prove that aluminium in water supplies is harmful to human beings.

Chromium

Few waters contain chromium from natural sources since chromium is generally present in rocks and soils as insoluble chromic oxide which is strongly sorbed to particulate matter. Chromate or dichromate salts are used extensively in metal pickling and plating operations, in anodizing aluminium, in the leather industry as a tanning agent, and in the manufacture of paints, dyes, explosives, ceramics, paper and many other substances. Chromic or chromite salts on the other hand, are used much less extensively being employed as mordants in textile dyeing, in the ceramic and glass industry and in photography. Chromium compounds may be present in wastes from many of the foregoing industries or may be discharged in chromium-treated cooling waters where the chromium is used as a corrosion inhibitor.

There is no evidence that chromium salts are essential or beneficial to human nutrition. Salts of trivalent chromium are not considered to be physiologically harmful; however, large doses of chromates lead to corrosive effects in the intestinal tract and to nephritis. Both the chromic and chromate ions are toxic to plants and interfere with the uptake of essential elements.

Copper

Copper salts occur in natural surface waters in trace concentrations and may occur in industrial waste discharges. Copper is used as an algicide for the control of undesirable algae growth and in the treatment of soils as a fungicide and a pesticide.

Copper compounds are toxic to plants and aquatic life. Prolonged ingestion may cause liver damage in man.

Lead

Some natural waters contain lead in solution. Lead may be introduced into water as a constituent of various wastes including industrial and mining effluents, lead plumbing and automobile exhaust. Certain lead salts, such as acetate and chloride, are readily soluble. However, lead which occurs in the carbonate, hydroxide and sulphate forms is sparingly soluble and will not remain long in natural waters.

Lead is a cumulative poison that tends to be deposited in the bone. The intake that can be regarded as safe cannot be stated definitely because the sensitivity of individuals to lead differs considerably. Studies on fish indicate that in water containing lead salts, a film of coagulated mucus forms over the gills and then the entire body, probably as a result of a reaction between lead and an organic constituent of mucus. The fish then die of suffocation. The toxic effects of lead on fish decreases with increasing hardness and dissolved oxygen.

Cadmium

In the elemental form, cadmium is insoluble in water. It occurs in nature largely as a sulphide salt, greenockite or as a cadmium blend and often as an impurity in zinc-lead ores.

Cadmium salts are cumulative and highly toxic to man having been implicated in some cases of food poisoning. Consumption of cadmium salts causes cramps, nausea, vomiting, and diarrhea. Cadmium affects reproduction in fish and zooplankton; however, the toxic effects vary with species and time of exposure.

Zinc

Generally, zinc occurs only in trace amounts in surface waters. The zinc ion is believed to adsorb strongly and permanently on particulate matter (e.g. silt) which settles out of suspension.

Zinc has no known adverse physiological effects upon man except at very high concentrations. At such concentrations, zinc gives water a milky appearance and causes a greasy film on boiling, thus making it unattractive for domestic water supply. Zinc is toxic to aquatic organisms and its toxicity decreases with increasing hardness.

Manganese

Manganese is similar to iron in that it is found in many industrial wastes and occurs in soils as manganic and manganous compounds. Under anaerobic conditions the manganic ion is reduced to soluble nitrate, sulfate, and chloride salts of manganese and is leached, along with iron, into ground and surface waters. Its presence like iron, may indicate domestic or industrial pollution.

Water with high manganese content is undesirable for its taste, colour and tendency to form deposits on cooking utensils.

Nickel

Nickel in ores and minerals is insoluble but as a salt (nickel ammonium sulphate, nickel nitrate, nickel chloride) is highly soluble.

Electroplating wastes may contain substantial amounts of nickel salts.

Nickel and its salts have generally proven to be non-toxic to man even at very high levels. Contact with nickel salt solutions may result in dermatitis and repeated inhalations of nickel compounds can cause lung cancer. Levels of 0.1 mg/L have been reported to adversely affect plant life.

Fluoride

Fluorides in high concentrations are not a common constituent of natural surface waters, but may naturally occur in detrimental concentrations in ground waters.

A condition known as "mottled enamel" (dental fluorosis) may occur when the concentration of fluoride ion in drinking water is in excess of 1.0 mg/L; however, small quantities have proven to be beneficial in reducing tooth decay. Excess concentrations affect animal breeding efficiency and may have detrimental effects on some plants.

Cyanide

Cyanides are likely to occur in effluents from gas works and coke ovens, from the scrubbing of gases produced from blast furnaces, in wastes from the surface cleaning of various metals, and in electroplating processes and other chemical industries.

Cyanide in water is toxic to biological life, the lethal concentration depending on water quality, temperature and type and size of organism.

Cobalt

Cobalt occurs naturally in the minerals cobaltite, smaltite and erythrite. It is widely used in the manufacture of alloys, the tungsten carbide tool industry and as pigments used in glass staining.

Cobalt is an essential element at trace levels for both animals and plant nutrition. It is known to be one of the main constituents of Vitamin B₁₂. Adverse effects due to cobalt are very slight even at high concentrations. No limits have been set on the maximum acceptable concentration for cobalt in domestic water supplies.

3. RADIOCHEMICAL ANALYSES

All elements are made up of atoms, each of which consists of a central nucleus surrounded by a number of electrons. Some nuclei are radioactive; they emit excess energy in the form of ionizing radiation as a result of nuclear disintegrations. The three types of ionizing radiations which are of principal interest in environmental studies are referred to as alpha, beta and gamma radiations.

1. Alpha rays are streams of fast moving helium nuclei. These are particles which can travel only a few centimetres in air and can be stopped by a sheet of paper or a layer of skin.
2. Beta rays are streams of fast moving electrons which are very much lighter than helium nuclei. The maximum range of most common beta rays is a few metres in the air or one to two centimetres in the human body.
3. Gamma rays are highly penetrating electromagnetic radiation of the same family as radio waves and x-rays. Like x-rays, gamma mass rays can pass right through the human body.

The number of nuclear disintegrations occurring in a substance per second is a measure of its radioactivity. The unit of radioactivity used in this report is becquerel (Bq). One becquerel equals one nuclear transformation per second and corresponds to approximately 27 picocuries. Radiological half life is the length of time required for one half of the unstable atom to disintegrate or change (i.e. radioactive decay).

Exposure to radiation is characterized by the transfer of energy to molecules of the cells which make up body tissues and organs. This can affect the normal function of the cells, resulting in damage to the tissues and organs. Exposure to the small doses of radiation which might be encountered in the environment will not result in immediate detectable damage; however, long-term effects may result. These effects are in apparently random occurrence of induced cancers and genetic defects in a small proportion of the exposed population. The numbers of effects induced are considered to be directly proportional to the amount of absorbed radiation.

Gross-alpha

Gross-alpha is a measure of the total radioactivity of all the alpha emitting materials in a sample. Measurements of gross-alpha activity provide useful reference points to enable trends to be detected. However, the results cannot be used to determine radiation dose or

health effects since the short range of alpha particles means that some will not be detected, thereby causing an underestimation of the total activity. Also, the alpha particles may be emissions from a mixture of materials that are radiologically and biologically different.

Gross-beta

Gross-beta is a measure of the total radiation of all the beta emitting materials in a sample. Measurements of gross-beta activity provide useful reference points to enable trends to be detected but cannot be used to determine radiation dose or health effects.

Radium-226

Radium-226 is a naturally occurring alpha-particle emitter formed from the decay of uranium-238 and has a radiological half life of 1602 years.

Uranium-total

Total uranium exists primarily as the isotope uranium-238 with less than 1% occurring as uranium-235. Uranium is a naturally occurring alpha-particle emitter which was formed at the same time as the earth (about 5×10^9 years) and is still present in significant quantities due to its extremely long radiological half-life (4.5×10^9 years).

Cesium-137

Cesium-137 is a beta-particle emitter formed as a fission product in nuclear weapons detonation and atomic reactor operation. Cesium-137 is readily adsorbed and retained by biological systems. Its radiological half life is 30 years.

Cesium-134

Cesium-134 is a beta-particle emitter also formed as a fission product in nuclear weapons detonation and atomic reactor operation. Cesium-134 is of less importance than Cesium-137 as its radiological half-life is only 72 hours.

Cobalt-60

Cobalt-60 is primarily formed in atomic reactor operation due to the neutron activation of trace quantities of cobalt-59 found in steel. Insignificant quantities are also formed from nuclear weapons detonation. Cobalt-60 has a radiological half life of 5.3 years and emits both beta and gamma radiation.

Tritium

Tritium exists fairly uniformly in the environment as a result of natural production by cosmic radiation and residual fallout from nuclear weapons tests. This background level is gradually being increased by the use of nuclear reactors to generate electricity.

Current tritium from the nuclear power industry comprises a small proportion of environmental tritium in comparison with that from nuclear weapons fallout and naturally produced tritium. However, nuclear reactors and fuel-processing plants are localized sources of tritium because of discharges during normal operation. This industry is expected to become the major source of environmental tritium contamination some time in the future if present growth trends continue and nuclear explosion in the atmosphere are not resumed. Tritium is produced in light water nuclear reactors by ternary fission, neutron capture in coolant additives, control rods and plates, and activation of deuterium. About 1% of the tritium in the primary coolant is released in gaseous form to the atmosphere; the remainder is eventually released in liquid waste discharges. Most of the tritium produced in reactors remains in the fuel and is released when the fuel is reprocessed.

Naturally occurring tritium is most abundant in precipitation and lowest in aged water because of its physical decay by beta emission to helium.

Iodine

Iodine is a chemical oxidant. It disinfects in a manner similar to chlorine. Iodine is the least soluble of all the halogens, hence it is the least likely to be hydrolyzed by water. It also has the lowest oxidation potential; that is, reacting more slowly with organic

compounds than chlorine. Because of this stability, iodine does not react with nitrogenous compounds as does chlorine. Iodine remains effective through a wider range than does chlorine; chlorine becomes less stable at pH of 8 as compared to iodine at pH of 10.

4. SYNTHETIC ORGANIC ANALYSES

The synthetic organic compounds referred to in this section are classified as pesticides and industrial chemicals. These compounds contain linked carbon atoms in their chemical structure and are, for the most part, synthesized from common chemicals. Furthermore they may be subdivided into chemical families of compounds sharing common characteristics. For example, organochlorine compounds (chlorinated hydrocarbons) contain chlorine, hydrogen and carbon in their structure; they have a tendency to accumulate in the fatty tissues of animals and are stable compounds (i.e. persistent).

Until recently, only a few classes of compounds such as drugs, food additives and pesticides were controlled by legislation. For example, the only pesticides which may be offered for sale in Ontario are those which have been registered under the authority of the Pest Control Products Act which is administered by Agriculture Canada. The term pesticide includes insecticides, herbicides and fungicides which are chemical compounds used to control insects, weeds or fungi (i.e. "pests") that attack crops, animals and man. In contrast to the regulation of pesticides, thousands of unregistered synthetic organic chemicals are in daily use as raw materials, products and additives. Very little is known about their possible health and environmental effects because of their sheer number and diversity of use. Many are not hazardous, but the adverse effects already encountered by some have created concern for preventative measures of both known and potentially hazardous substances.

Polychlorinated Biphenyls (PCBs)

PCBs are a range of industrial chemicals produced by direct chlorination of biphenyl. The North American products in this family are sold under the name Arochlor. Arochlors are characterized by a four digit number (e.g. Arochlor 1242, Arochlor 1254 of which the last two digits refer to

the weight percentage of chlorine in the products. There are 208 possible compounds which could be formed by this reaction. Each product is a different mixture of up to 100 of these, each with its own unique physical, chemical and biological properties.

The main characteristics of PCBs are their chemical, physical, biological inertness and electrical insulating properties. They have been widely used in transformers, capacitors, as heat exchange fluids, plasticizers, in inks, paint, lubricants, and many other products. Spills and waste disposal practices have resulted in very large inputs of these chemicals to all facets of the environment.

PCBs are lipophylic and thus continuing environmental inputs have led to biological uptake and concentration. Of particular concern are the excessive levels detected in some fish. Levels in water and air to date have not demonstrated a threat to human health, as might arise from fish consumption. PCBs have been shown to be both acutely and chronically toxic, carcinogenic and teratogenic. Limits for human consumption have been set based on tests on monkeys and rats. The present acceptable level of PCBs in fish is 2.0 ppm. However, for protection of the fisheries resource from reproductive failure, 0.1 ppm has been suggested. Long-term use of PCBs, at elevated temperatures, and inefficient incineration of these materials have been shown to produce the highly toxic chlorodibenzofurans, closely related to dioxins.

Trichlorophenoxyacetic Acid (2,4,5-T)

2,4,5-T is a chlorophenoxy acid herbicide. Other members of this family include 2,4-D and 2,4,5-TP which were introduced as selective weed killers at the end of World War II. Their uses include weed control in cereal crops, lawns, along roadsides, hydro and railroad rights-of-way and control of aquatic weeds.

The human toxicity of these herbicides is low; effects on farmstock and wildlife from current environmental levels would appear to be negligible and no discernible toxic effects have been reported in fish at levels below 100 mg/L.

However, 2,3,7,8-tetrachlorodibenzodioxin (TCDD), an extremely toxic compound, has been detected in 2,4,5-T formulations as a by-product of its manufacture, thus raising doubts as to the human safety of the use of 2,4,5-T, and the related herbicide 2,4,5-TP (Silvex). A tolerance level of 0.1 ppm 2,3,7,8-TCDD in 2,4,5-T formulation has been set, but the adequacy of the safety factor is still under discussion.

Pentachlorophenol (PCP)

Pentachlorophenol is used as a herbicide, defoliant, insecticide, fungicide and wood preservative. The salts, esters and ethers of PCP are also effective herbicides.

PCP is considered relatively toxic to wildlife and fish and its presence in water can cause tainting of fish flesh, reducing its palatability. PCP can be harmful to man if inhaled and absorbed through the skin. There is no known antidote to PCP poisoning.

In addition to its inherent toxicity, a further problem is posed by the presence of high chlorinated dioxins, (octachlorodioxin, heptachlorodioxin, hexachlorodioxin) in PCP formulations. Whilst considerably less toxic than 2,3,7,8-TCDD (tetrachlorodibenzodioxin), it has been suggested that these compounds may degrade to 2,3,7,8-TCDD under the influence of sunlight and other environmental conditions.

STATION IDENTIFIER CODES, ABBREVIATED PARAMETER HEADINGS AND QUALIFYING REMARKS CODES

Station Identifier Codes

The station identifier codes which appear in the index and the top right-hand corner of the data pages are numerical descriptions of the sampling station locations and are used primarily for electronic data processing of the water quality data. The eleven digit figure is decoded as follows: the first two digits refer to the terminal basins (see figures 2 and 3), the following four digits refer to the river

basin (each river basin in a terminal basin is assigned a unique number), the next three digits refer to the station number within the river basin and the last two digits refer to the type of sample (e.g. 01-lake sample, 02-stream sample, 82 to 89-composite sample, e.g. 83 - 3 part composite across a station sampling range).

Distance

The distance in kilometres is measured along the centre line of a watercourse to the sampling station location from the junction of the related terminal stream and terminal basin.

Abbreviated Headings

BOW	body of water
STN NO	base station number
LAT	latitude
LONG	longitude
UTM	Universal Transverse Mercator Grid
SAMP DTE DY MO YR	sample date; day, month, year
HOUR LMT	hour(s) local mean time (2400 hour clock)
STN DIST FEET	distance from base station (in feet) (not applicable)
STN BRG	bearing of sampling point (deg N) from base station (not applicable)
SAMP DEPTH MTRS	sample depth (in metres)
PJ	project (not applicable)

Abbreviated Parameter Headings

The alphabetic codes appearing as the parameter headings are a series of unique codes used for computer processing. Each alphabetic code identifies a particular water quality parameter and analytical procedure.

Test Name and Abbreviated Description	Description of Test	Units of Measure
ACDT ACIDITY TOTAL	ACIDITY, TOTAL	MILLIGRAM PER LITRE AS CALCIUM CARBONATE
ALKT ALK TOTAL	ALKALINITY, TOTAL	MILLIGRAM PER LITRE AS CALCIUM CARBONATE
ALUT ALUMINUM UNF. TOT.	ALUMINIUM, UNFILTERED TOTAL	MILLIGRAM PER LITRE AS ALUMINIUM
ASUT ARSENIC UNF. TOT.	ARSENIC, UNFILTERED TOTAL	MILLIGRAM PER LITRE
AS3UR ARSENTE UNF. REAC.	ARSENIC +3 UNFILTERED REAC.	MILLIGRAM PER LITRE AS ARSENIC
AS5UR ARSENATE UNF. REAC.	ARSENIC +5, UNFILTERED REAC.	MILLIGRAM PER LITRE AS ARSENIC
BOD ₅ 5 DAY TOT. DEM.	BOD, 5 DAY, TOTAL DEMAND	MILLIGRAM PER LITRE AS OXYGEN
CAUR CALCIUM UNF. REACT.	CALCIUM, UNFILTERED REACTIVE	MILLIGRAM PER LITRE AS CALCIUM
CCNAUR CYANIDE AVAIL UNF. REACT.	CYANIDE, AVAILABLE UNFILTERED REACTIVE	MILLIGRAM PER LITRE AS HYDROGEN CYANIDE
CCNFUR FREE UNF. REACT.	CYANIDE, FREE UNFIL. REACTIVE	MILLIGRAM PER LITRE AS HYDROGEN CYANIDE
CCUT CARBON UNF TOT.	CARBON, UNFILTERED TOTAL	MILLIGRAM PER LITRE AS CARBON
CDUT CADMIUM UNF. TOT.	CADMIUM, UNFILTERED TOTAL	MILLIGRAM PER LITRE AS CADMIUM

Test Name and Abbreviated Description	Description of Test	Units of Measure
CLIDUR CHLORIDE UNF. REAC.	CHLORIDE, UNFILTERED REACTIVE	MILLIGRAM PER LITRE AS CHLORINE
COD CHEM. OX. DEMAND	CHEMICAL OXYGEN DEMAND	MILLIGRAM PER LITRE AS OXYGEN
COLAP COLOUR APPARENT	COLOUR, APPARENT	HAZEN COLOUR UNIT
COLTR COLOUR TRUE	COLOUR, TRUE	HAZEN COLOUR UNIT
COND25 CONDUCT. 25C	CONDUCTIVITY AT 25°C	MICROMHOS/CM (CONDUCTIVITY) AT 25 DEGREES CENTIGRADE
COUT COBALT UNF. TOT.	COBALT, UNFILTERED TOTAL	MILLIGRAM PER LITRE AS COBALT
C060 COBALT 60	COBALT 60	BECQUEREL PER LITRE
CRUT CHROMIUM UNF. TOT.	CHROMIUM, UNFILTERED TOTAL	MILLIGRAM PER LITRE AS CHROMIUM
CS134 CESIUM 134	CESIUM 134	BECQUEREL PER LITRE
CS137 CESIUM 137	CESIUM	BECQUEREL PER LITRE
CUUT COPPER UNF. TOT.	COPPER, UNFILTERED TOTAL	MILLIGRAM PER LITRE AS COPPER
DO DISSOLVED OXYGEN	DISSOLVED OXYGEN	MILLIGRAM PER LITRE AS OXYGEN

Test Name and Abbreviated Description	Description of Test	Units of Measure
DOC CARBON DISSOLVED ORGANIC	CARBON, DISSOLVED ORGANIC	MILLIGRAM PER LITRE AS CARBON
ECMF ESCH IA COLI MF	ESCHERICHIA COLIFORM, MEMBRANE FILTRATIONS TECHNIQUE	COUNTS PER 100 ML
FCMF FECAL COLIFORM MF	FECAL COLIFORM MEMBRANE FILTRATION TECHNIQUE	COUNTS PER 100 ML
FEUT IRON UNF. TOT.	IRON, UNFILTERED TOTAL	MILLIGRAM PER LITRE AS IRON
FFIDUR FLUORIDE UNF. REAC.	FLUORIDE, UNFILTERED REACTIVE	MILLIGRAM PER LITRE AS FLUORINE
FSMF FECAL STREPCUS MF	FECAL STREPTOCOCCUS, MEMBRANE FILTRATION TECHNIQUE	COUNTS PER 100 ML
FWFLOW STREAM FLOW	STREAMFLOW	CUBIC METRE (1000L) PER SECOND
FWPH PH FIELD	PH, FIELD	NEGATIVE LOGARITHM OF HYDROGEN ION CONCENTRATION
FWSTRC STREAM COND.	STREAM CONDITION	NOT APPLICABLE
FWTEMP WATER TEMP.	TEMPERATURE, WATER	DEGREES CELSIUS

Test Name and Abbreviated Description	Description of Test	Units of Measure
GACF GROSS ALPHA CT. FILTERED	GROSS ALPHA CT., FILTERED	BECQUEREL PER LITRE
GACP GROSS ALPHA CT UNDISSOL.	GROSS ALPHA CT., UNDISSOLVED	BECQUEREL PER LITRE
GBCF GROSS BETA CT. FILTERED	GROSS BETA CT., FILTERED	BECQUEREL PER LITRE
GBCP GROSS BETA CT. UNDISSOL.	GROSS BETA CT., UNDISSOLVED	BECQUEREL PER LITRE
HARDT HARDNESS TOTAL	HARDNESS, TOTAL	MILLIGRAM PER LITRE AS CALCIUM CARBONATE
HGUT MERCURY UNF. TOT.	MERCURY, UNFILTERED TOTAL	MICROGRAM PER LITRE AS MERCURY
HH3 TRITIUM HYDROG-3	TRITIUM, (HYDROGEN 3)	BECQUEREL PER LITRE
II131 IODINE 131	IODINE 131	BECQUEREL PER LITRE
KKUR POTASSIUM UNF. REAC.	POTASSIUM, UNFILTERED REACTIVE	MILLIGRAM PER LITRE AS POTASSIUM
MGUR MAGNESIUM, FIL. REAC.	MAGNESIUM, FILTERED REACTIVE	MILLIGRAM PER LITRE AS MAGNESIUM
MNUT MANGANESE, UNF. TOT.	MANGANESE, UNFILTERED REACTIVE	MILLIGRAM PER LITRE AS MANGANESE

Test Name and Abbreviated Description	Description of Test	Units of Measure
NAUR SODIUM UNF. REAC.	SODIUM, UNFILTERED REACTIVE	MILLIGRAM PER LITRE AS SODIUM
NIUT NICKEL UNF. TOT.	NICKEL, UNFILTERED TOTAL	MILLIGRAM PER LITRE AS NICKEL
NNHTFR NH3-N TOTAL FIL. REAC.	AMMONIUM, TOTAL FILTERED REACTIVE	MILLIGRAM PER LITRE AS NITROGEN
NNKI TOTAL N	TOTAL NITROGEN: SUM OF NITRATE NITRITE AND KJELDAHL-NITROGEN	MILLIGRAM PER LITRE AS NITROGEN
NNKUR KJELDAHL ORGANIC UNF. REAC.	KJELDAHL-NITROGEN, ORGANIC UNFILTERED REACTIVE	MILLIGRAM PER LITRE
NNOTFR NO2+NO3N FIL. REACT.	NITRATES, TOTAL FILTERED REACTIVE	MILLIGRAM PER LITRE AS NITROGEN
NNOTUR NO1+NO3N UNF, REAC.	NITRATES, TOTAL UNFILTERED REACTIVE	MILLIGRAM PER LITRE AS NITROGEN
NNO2FR NO2-N FIL. REAC.	NITRITE, FILTERED REACTIVE	MILLIGRAM PER LITRE AS NITROGEN
NNTIFR INORG. N. TOTAL FIL. REAC.	NITROGEN, TOTAL INORGANIC FILTERED REACTIVE	MILLIGRAM PER LITRE
NNO2UR NO2-N UNF. REAC.	NITRITE, UNFILTERED REACTIVE	MILLIGRAMS PER LITRE AS NITROGEN

Test Name and Abbreviated Description	Description of Test	Units of Measure
NN03FR N03-N FILT. REAC.	NITRATE, FILTERED REACTIVE	MILLIGRAM PER LITRE AS NITROGEN
NN03UR N03-N HNF. REAC.	NITRATE, UNFILTERED REACTIVE	MILLIGRAM PER LITRE AS NITROGEN
NNTKUR K'DAHL N TOTAL UNF. TOT.	NITROGEN, TOTAL KJELDAHL UNFIL. REACTIVE	MILLIGRAM PER LITRE AS NITROGEN
PBUT LEAD UNF. TOT.	LEAD, UNFILTERED TOTAL	MILLIGRAM PER LITRE AS LEAD
pH	pH (-LOG H+CONC), LAB.	NEGATIVE LOGARITHM OF HYDROGEN ION CONCENTRATION
PHNOL PHENOLS UNF-REAC	PHENOLICS, UNFILTERED REACTIVE	MICROGRAM PER LITRE AS PHENOL
PP04FR P04 FIL. REAC.	PHOSPHATE, FILTERED REACTIVE	MILLIGRAM PER LITRE AS PHOSPHORUS
PP04UR P04 UNF. REAC.	PHOSPHATE, UNFILTERED REACTIVE	MILLIGRAMPER LITRE AS PHOSPHORUS
PPUT PHOSPHOR UNF. TOT.	PHOSPHORUS, UNFILTERED TOTAL	MILLIGRAM PER LITRE AS PHOSPHORUS
PSAMF PSEUDOMN AERUG, MF	PSEUDOMONAS, AERUGINOSA MEMBRANE FILTRATION TECHNIQUE	COUNTS PER 100 ML
P1PCBT PCB TOTAL	POLYCHLORINATED BIPHENOLS, TOTAL	MICROGRAM PER LITRE
P3245T 2,4,5-T	2,4,5-Trichlorophnoxyacetic	MICROGRAM PER LITRE

Test Name and Abbreviated Description	Description of Test	Units of Measure
RA226F RADIUM 226 FIL.	RADIUM-226, FILTERED	BECQUEREL PER LITRE
RA226T RADIUM 226 TOT.	RADIUM-226, TOTAL	BECQUEREL PER LITRE
RSF RESIDUE FILTERED	RESIDUE, FILTERED	MILLIGRAM PER LITRE
RSFRAD RESIDUE FILTERED RADIOLOG	RESIDUE, FILTERED RADIOLOGICAL	MILLIGRAM PER LITRE
RSP RESIDUE PARTIC.	RESIDUE, PARTICULATE	MILLIGRAM PER LITRE
RSPRAD RESIDUE PARTIC. RADIOLOG	RESIDUE, PARTICULATE RADIOLOGICAL	MILLIGRAM PER LITRE
RST RESIDUE TOTAL	RESIDUE, TOTAL	MILLIGRAM PER LITRE
SAMPLE NUMBER	SAMPLE NUMBER, FIELD	NOT APPLICABLE
S103UR SILICATE UNF. REAC.	SILICATES, UNFILTERED REACTIVE	MILLIGRAM PER LITRE AS SILICON
SOLEXT SOLVENT EXTRACT.	SOLVENT EXTRACTABLES	MILLIGRAM PER LITRE
SSIDUR SULPHIDE UNF. REAC.	SULPHIDE, UNFILTERED REACTIVE	MILLIGRAM PER LITRE
SS04UR SULPHATE UNF. REAC.	SULPHATE, UNFILTERED REACTIVE	MILLIGRAM PER LITRE AS SULPHATE

Test Name and Abbreviated Description	Description of Test	Units of Measure
TCMF COLIFORM TOTAL MF	COLIFORM, TOTAL MEMBRANE FILTRATION TECHNIQUE	COUNTS PER 100 ML
TCMFBK COLIFORM TOTAL MF BCKGRD	COLIFORM, TOTAL MEMBRANE FILTRATION TECHNIQUE BACKGROUND	COUNTS PER 100 ML
TURB TURB'ITY	TURBIDITY	FORMAZIN TURBIDITY UNIT
UU238 URANIUM 238	URANIUM 238	MILLIGRAM PER LITRE
X3PCPH PENTACHL PHENOL	PENTACHLOROPHENOL	NANORGRAMS PEC LITRE
ZNUT ZINC UNF. TOT.	ZINC, UNFILTERED TOTAL	MILLIGRAM PER LITRE AS ZINC

OTHER ABBREVIATIONS

ARITH MEAN	arithmetic mean
AVE.	avenue
AVG OR GEOM MN	arithmetic mean or geometric mean (denoted by *)
BLVD.	boulevard
BR.	branch, bridge or brook
CORP.	corporation
CAN.	Canadian
C.N.R.	Canadian National Railway
CO.	county or company
CONC.	concession
C.P.R.	Canadian Pacific Railway
CR.	Creek
DR.	drive
FT.	feet
GEOM MEAN	geometric mean
HWY.	highway
JNT.	junction
L.	left
MG	milligram(s)
MG/L or mg/L	milligrams per litre
ML	millilitre(s)
N.	north
NG/L	nanogram(s) per litre
NO/OF SAMPLES	number of samples
PT.	part or point
Q.E.W.	Queen Elizabeth Way
R.	river or right
RD.	road
R.R.	railroad
RW.	railway
S.	south
STD DEV	standard deviation
S.T.P.	sewage treatment plant
TWP.	township
UG/L	micrograms per litre
W.P.C.P.	water pollution control plant
WW.	water-works

An "Exponent" is used to move the decimal point to the right when the result is greater than 7 digits or to the left if the result is measured to more than three decimal places.

EXPONENT = + 4	multiple result by	10,000
= + 3	" " "	1,000
= + 2	" " "	100
= + 1	" " "	10
= - 1	divide result by	10
= - 2	" " "	100
= - 3	" " "	1,000
= - 4	" " "	10,000

ANALYTICAL TECHNIQUES USED TO MEASURE WATER QUALITY

Microbiological Parameters

Analytical Technique

Total Coliforms	Membrane Filtration
Fecal Coliforms	Membrane Filtration
Fecal Streptococcus	Membrane Filtration
Pseudomonas Aeruginosa	Membrane Filtration
Background Count	Membrane Filtration

Chemical and Physical Parameters

Analytical Technique

Alkalinity	Auto* fixed endpoint titration
Ammonia-N (filtered total)	Auto modified Berthelot reaction
Arsenic	Flameless AAS**; colourimetry
Cadmium	AAS
Calcium	AAS; EDTA titrimetric
Carbon	Auto oxidation, colourimetry
Chloride	Auto potentiometric titration; Auto FeCNS
Chromium	AAS; colourimetry
Conductivity	25°C thermostated conductivity meter
Copper	AAS
Iron (total)	AAS; Auto TPTZ colourimetry
Lead	AAS
Magnesium	AAS; calculation from hardness, Ca
Manganese	AAS; Auto formal doxine colourimetry
Mercury	Flameless AAS
Nickel	AAS
Nitrate + Nitrite-N (filtered)	Auto hydrazine reduction-diazotization
Kjeldahl-N	Digest, Auto modified Berthelot reaction
Phosphate-P (filtered reactive)	Auto molybdenum blue-ascorbic acid
pH	Potentiometric-glass electrode
Phenolics-reactive	Auto distillation-4AAP
Phosphorus-total	Digest, Auto molybdenum blue-ascorbic acid
Phosphorus-filtered total	Digest, Auto molybdenum blue-ascorbic acid
Potassium	AAS

Selenium
Silicates-reactive
Sodium
Solids-suspended
Sulfate
Turbidity
Zinc

Fluorimetry
Auto molybdenum blue-ascorbic acid
AAS
Gravimetric
Auto MTB colourimetry; Ion Chromatography
Nephelometry, formazin standard
AAS

Radiochemical Parameters

Gross alpha

Nuclear disintegrations count from
evaporated residues

Gross beta

Nuclear disintegrations count from
evaporated residues

Radium-226

Dieminatation technique

Uranium-total

Fluorometric technique

Cesium-137

Gamma spectrometry

Cesium-134

Gamma spectrometry

Cobalt-60

Gamma spectrometry

Synthetic Organic Parameters

PCB

Solvent extraction, gas chromatography

2,4,5-T

Solvent extraction, gas chromatography

PCP

Solvent extraction, gas chromatography

* Automated instrumentation

** Atomic Absorption Spectrophotometry

GLOSSARY OF TERMS

Arithmetic Mean

- The nth quotient of the summation of n observations. The equation for the arithmetic mean (\bar{X}) can be expressed as:

$$\bar{X} = \frac{X_1 + X_2 + X_3 + \dots + X_n}{n}$$

Detection Limit

- The amount of analyte required to be present to ensure that when it is 'absent' it will not be reported as 'present'.

Geometric Mean

- The nth root of the product of n observations. The equation for the geometric mean (G_x) can be expressed as:

$$G_x = \sqrt[n]{X_1 \times X_2 \times \dots \times X_n}$$

or

$$G_x = \text{antilog} \frac{(\log X_1 + \log X_2 + \dots + \log X_n)}{n}$$

Standard Deviation

- A measure of variability or dispersion. For a set of n observations, X_i ; $i = 1, \dots, n$. The standard deviation is given as:

$$S = \sqrt{\Sigma(x_i - \bar{x})^2 / (n - 1)}$$

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"Guide to Eating Ontario Sport Fish."

ABBREVIATIONS AND REMARKS USED ON REPORTS

ABBREVIATIONS USED:

BTH GRAB	BOTTOM GRAB SAMPLE
CORE	BOTTOM CORE SAMPLE
CNT LOW	BACTERIA COUNT UNACCEPTABLE
DATA AVL	DATA NOT STORED IN THIS SYSTEM BUT IS AVAILABLE
DC	DEPTH COMPOSITE SAMPLE
DD	DAY
ET	END TIME
EXP	PRECIPITATING AT EXPOSURE (FOR PRECIP. SAMPLES)
GC	GAUGE DEPTH (FOR PRECIP. SAMPLES)
I	DEPTH INTERVAL (IN METERS) WHEN ASSOCIATED WITH DC TIME INTERVAL (IN HOURS) WHEN ASSOCIATED WITH TC
ID	INITIAL DATE (SET-UP DATE FOR PRECIP. SAMPLES)
IT	INITIAL TIME (SET-UP TIME FOR PRECIP. SAMPLES)
LAT	LATITUDE
LONG	LONGITUDE
LMT	LOCAL MEAN TIME
LO1	LOW VOLUME SEQUENTIAL SAMPLE
LO2	LOW VOLUME NUTECH SAMPLE
MM	MONTH
N	NUMBER OF SAMPLES (USED FOR DC, TC AND CORE SAMPLES)
DRY	PRECIPITATION SAMPLE (DRY ONLY)
WET	PRECIPITATION SAMPLE (WET ONLY)
BULK	PRECIPITATION SAMPLE (BULK)
GRND	PRECIPITATION SAMPLE (ON GROUND SNOW COURSE)
REM	PRECIPITATING AT REMOVAL (FOR PC SAMPLES 0,1,2,3)
SD	START DEPTH
ST	START TIME
SED CORE	SEDIMENT CORE SAMPLE (DEPTH FROM AND TO MEASURED IN CM)
SED GRAB	SEDIMENT GRAB SAMPLE (DEPTH FROM AND TO MEASURED IN CM)
WLE	WATER LAYER - WHOLE LAKE COMPOSITE
EPI	WATER LAYER - EPIILIMNION ZONE
MET	WATER LAYER - METALIMNION ZONE
HYP	WATER LAYER - HYPOLIMNION ZONE
EUP	WATER LAYER - EUPHOTIC ZONE
GEN	WATER LAYER - GENERAL LAYER
TC	TIME COMPOSITE SAMPLE
TNTC	BACTERIA TOO NUMEROUS TO COUNT
V	VOLUME WHEN ASSOCIATED WITH LO1 AND LO2 SAMPLES
YY	YEAR

NOTE:

ONE SAMPLE DESIGNATES DATA ASSOCIATED WITH A LOCATION AT ONE POINT IN TIME

ABBREVIATIONS AND REMARKS USED ON REPORTS

INDIVIDUAL TEST VALUES MAY BE QUALIFIED BY ONE OF THE FOLLOWING REMARKS:

REMARK	MEANING OF REMARK	COMMENT CODE
<	ACTUAL RESULT < THAN REPORTED VALUE	PE
<=>	APPROXIMATE RESULT	
<E	NO RESP.: (EXCESS DIL'N) MIN. VALUE	PE
<N	NON-DETECTED	PE
<R	DETECT LIMIT REPORT: VALUE < LIMIT	PE
<S	TRACE RESP.: < THAN VALUE REPORTED	PE
<T	LOW VALUE TENTATIVE: FOR INFO ONLY	PT
<W	0 VALUE IS MIN. MEASURABLE AMOUNT	PT
IAA	NO DATA: ANAL. REQ ABSENT-AMBIGUOUS	
IAD	NO DATA: ANOMALOUS DATA WITHDRAWN	
IAI	ADDITIONAL INFORMATION AVAIL AT LAB	
IAL	NO DATA: AL NOT DONE, PH > 5.5	
IAM	NO DATA: PH > 7	
IAR	SEE ATTACHED REPT: NO NUMERIC VALUE	
IAW	NO DATA: ANALYSIS WITHDRAWN	
IBC	NO DATA: BACKGRND COLOUR INTERFERES	
IBL	NO DATA: UNRELIABLE BLANK	
IBN	NO DATA: BACKGRND TO NUMEROUS TO CNT	
IBT	NO DATA: SAMPLE BROKEN IN TRANSIT	
ICA	NO DATA: CARBONATE NOT DONE, PH>5.0	
ICC	COURT CASE: RESULTS REPT. ELSEWHERE	
ICR	COULD NOT PERFORM CONFIRMING REANAL	
ICS	NO DATA: CONTAMINATION SUSPECTED	
ICU	TYPICAL/TOTAL COLONY CNT UNSUITABLE	
IDD	SAMP. SUBM. AS DUP. FOUND TO DIFFER	
IDI	NO DATA: SAMPLE DISCARDED IN ERROR	

ABBREVIATIONS AND REMARKS USED ON REPORTS

INDIVIDUAL TEST VALUES MAY BE QUALIFIED BY ONE OF THE FOLLOWING REMARKS:

REMARK	MEANING OF REMARK	COMMENT CODE
EF	NO DATA: LABORATORY EQUIP. FAILURE	
EP	NO DATA: EXCESS. PRESERVATIVE USED	
FC	NO DATA: FOIL CAP CONTAMINATED SAMP	
FF	NO DATA: FIELD FILTERED SAMP REQURD	
GL	NO DATA: GREEN LABEL REQ ON BOTTLE	
HB	HIGH BACKGND ABSORBANCE IN EXTRACT	
HI	RERUN: NO VALUE,OFFSCALE HIGH	
IC	NO DATA: IMPROPER CONTAINER	
IF	NO DATA: INVALID FILTER-NO AIR VOL	
IL	NO DATA: SAMPLE INCORRECTLY LABELED	
IM	INTERNAL LAB MEMO; FOR LAB USE ONLY	
IP	NO DATA: INSUFFICIENT PRESERVATIVE	
IR	INSUFFICIENT SAMP FOR REPEAT ANALY	
IS	NO DATA: INSUFFICIENT SAMPLE	
IV	NO DATA: INVALID SAMPLE	
LA	SAMPLE SPOILED IN LAB ACCIDENT	
LC	NO DATA: LAB CAPACITY EXCEEDED	
LD	NO DATA: TEST QUEUED:SAMP DISCARDED	
LO	RERUN: NO VALUE,OFFSCALE LOW	
LP	NO DATA: PERISHABLE TEST QUEUE LATE	
HS	SAMP TOO COMPLEX REFERRED TO HS GRP	
HA	NO AUTHORIZATION TO PERFORM ANALY	
NE	SUBM SHEET MISPLACED - NOT ENTERED	
NF	INFORMATION NOT REC'D FROM SUBMITOR	
NI	NO DATA: SAMP NOT STORED IN ICE	

ABBREVIATIONS AND REMARKS USED ON REPORTS

INDIVIDUAL TEST VALUES MAY BE QUALIFIED BY ONE OF THE FOLLOWING REMARKS:

REMARK	MEANING OF REMARK	COMMENT CODE
INP	NO DATA: NO APPROP. PROCEDURE AVAIL	
INR	NO DATA: SAMPLE NOT RECEIVED AT LAB	
INS	NO DATA: NOT EQUIP. TO ANALY SAFELY	
INT	NO DATA: NO TIME RECORDED	
IOC	NO DATA: ORGANIC CARBON CONTENT>17%	
IOF	SLUDGE SAMP DISCARD:BOTTLE OVERFILL	
IOP	NO DATA: OBSCURED PLATE	
IOS	NO DATA: OPTIONAL SAMPLE	
IOT	SAMPLE OVERTITRATD:NO REPEAT POSSBLE	
IPE	PROCEDURE ERROR: SAMP NOW DISCARDED	
IPH	SAMP PH OUTSIDE VALID RANGE	
IPH	NO DATA: PIECE MISSING	
IPR	NO DATA: PRESERVATIVE REQUIRED	
IPU	NO DATA:VSAMPLE PRESUMED UNSTERILE	
IQU	NO DATA: QUALITY CONTROL UNACCEPT.	
IRC	RESULT CHANGED: REPORT REVISED	
IRD	SEE ATTCH. REPT:NO NUM VALUE:DIOXIN	
IRE	NO DATA: SAMP CONTAINER RECY. EMPTY	
IRI	SEE ATTCH. REPT:NO NUM VALUE:ITCS	
IRL	RESULT FORTHCOMING FROM RAD. LAB	
IRM	SEE ATTCH. REPT:NO NUM VALUE:MICRO	
IRN	SEE ATTCH. REPT FOR NUMERIC RESULT	
IRO	SEE ATTCH. REPT:NO NUM VALUE:OTCS	
IRP	SEE ATTCH. REPT:NO NUM VALUE:PEST	
IRR	NO DATA: RERUN HAS BEEN INITIATED	

ABBREVIATIONS AND REMARKS USED ON REPORTS

INDIVIDUAL TEST VALUES MAY BE QUALIFIED BY ONE OF THE FOLLOWING REMARKS:

REMARK	MEANING OF REMARK	COMMENT CODE
RT	SAMPLE NOT REFRIGERATED IN TRANSIT	
RW	SEE ATTCH. REPT:NO NUM VALUE:WQS	
SD	NO DATA: SAMP DECOMPOSED	
SE	SAMPLE EXAMINED: SEE OTHER RESULTS	
SF	NO DATA: SAMP RECEIVED FROZEN	
SL	NO DATA: SAMP ARRIVED LATE FOR ANAL	
SM	NO DATA: SAMP MISSING:LOST IN LAB	
SS	SEPARATE SAMP, PROPER. PRESERVE REQ	
TE	TURB LIMIT OF APP COLOR TEST EXCEED	
TF	NO DATA: TORN FILTER	
TH	TURB EXCEEDED RANGE OF INSTRUMENT	
TN	NO DATA: TOO NUMEROUS TO COUNT	
TU	NO DATA: ANALY TEMPORARILY UNAVAIL.	
TW	NO DATA: TARE WT. > LOADED WT.	
TX	NO DATA: TIME LIMIT EXPIRED	
U	UNSUITABLE FOR ANALYSIS	
UB	BROKEN SAMP CONTAINER	
UD	INSUFFICIENT SAMP	
UE	NO DATA: UNCORRECTABLE ERROR	
UI	NO DATA: UNDETERMINED INTERFERENCE	
UR	NO DATA: UNPRESERVED SAMP REQUIRED	
VE	INSUFFICIENT SAMP:VISUAL EST:RSP<15	
VU	NO DATA: VALUES USED IN CACL UNVAIL	
WP	NO DATA: WRONG PRESERVATIVE USED	
12	NO DATA: SAMP AGE EXCEEDS 12HR	

ABBREVIATIONS AND REMARKS USED ON REPORTS

INDIVIDUAL TEST VALUES MAY BE QUALIFIED BY ONE OF THE FOLLOWING REMARKS:

REMARK	MEANING OF REMARK	COMMENT CODE
72	NO DATA: SAMPLE AGE EXCEEDS 72HR	
:BT	NO DATA: SAMPLE BROKEN IN TRANSIT	
>	ACTUAL RESULT > THAN REPORTED VALUE	PE
>SF	ACTUAL MASS > SIZED FIBRE MASS	PE
A>	APROX RSLT:EXCEED NORMAL RNGE LIMIT	
AAI	ADDITIONAL INFO AVAILABLE FROM LAB	
AID	APPROX VALUE: INSUFFICIENT DILUTION	
AIP	ANALYSIS IN PROGRESS	
ALO	TOO ORGANIC;4:1 SOL:N:SOIL RATIO	
APD	ANALYSIS PERFORMED AT DORSET LAB	
BPS	RESULTS BIASED LOW DUE TO LONG STOR	
C	BACKGROUND COUNT TO NUMEROUS	
CIC	POSSIBLE CONTAM DUE TO IMPROPER CAP	
CHS	IDENTITY CONFIRMED BY GC/MASS SPEC	
CRO	CALCULATED RESULT ONLY	
DCC	SAMPLE KNOWN TO CONTAIN CARCINOGENS	
DCN	SAMPLE KNOWN TO CONTAIN CYANIDE	
DCP	DANGEROUS CONSTITUENTS PRESENT	
DUP	DUPLICATE	
E	ESTIMATED OR COMPUTED VALUE STORED	
EBR	NO RESULT: BOTTLE RECEIVED EMPTY	
EDC	EXCEEDS 1978 DRINK WATER QUAL CRIT	
EY	ESTIMATED VALUE - TARE WT UNVAIL.	
FAN	FRACTION ANALY: NON-AQUEOUS PHASE	
FAP	FRACTION ANALY: PARTICULATE ONLY	

ABBREVIATIONS AND REMARKS USED ON REPORTS

INDIVIDUAL TEST VALUES MAY BE QUALIFIED BY ONE OF THE FOLLOWING REMARKS:

REMARK	MEANING OF REMARK	COMMENT CODE
FBA	LAB STAFF:FILT.WHOLE SAMP BEFORE AN	
HRF	SUSPECTED HIGH RESULT:IRON PRECIP	
LPI	LABELS PROBABLY INTERCHANGED	
M	MANUALLY ANALYSED	
NAF	NOT ALL REQUIRED TESTS FOUND	
NED	NOT ENOUGH DATA	
NNM	NOTE: CORRECTED VALUE	
NSS	NO SUITABLE SAMPLE	
NTR	NO TIME RECORDED: ANAYL. PERFORMED	
PFS	TEST PERFORMED ON PREY FROZEN SAMP	
PHA	PH ADJUSTED BEFORE ANALYSIS	
PLD	PASSIVE LOADING	
PNF	TEST PERFORMED ON NON-FROZEN SAMPLE	
PNS	TEST PERFORMED ON UNPRESERVE SAMPLE	
PPS	TEST PERFORMED ON PRESEVERED SAMPLE	
PS2	PCB RESEM.MIX AROCLR 1242 1245 1260	
P20	PCB RESEMBLED MIX AROCLOR 1242 1260	
P21	PCB RESEMBLED AROCLOR 1221	
P24	RESEMBLED MIX: AROCLOR 1242 AN 1254	
P28	RESEMBLED MIX: AROCLOR 1242 AN 1248	
P40	RESEMBLED MIX: AROCLOR 1254 AN 1260	
P42	PCB RESEMBLED AROCLOR 1242	
P48	PCB RESEMBLED AROCLOR 1248	
P54	PCB RESEMBLED AROCLOR 1254	
P60	PCB RESEMBLED AROCLOR 1260	

ABBREVIATIONS AND REMARKS USED ON REPORTS

INDIVIDUAL TEST VALUES MAY BE QUALIFIED BY ONE OF THE FOLLOWING REMARKS:

REMARK	MEANING OF REMARK	COMMENT CODE
P84	RESEMBLED MIX: AROCLOR 1248 AN 1254	
R24	REPEAT: 24HR BETWEEN SAMP AND ANAL	
R48	REPEAT: 48HR BETWEEN SAMP AND ANAL	
R72	REPEAT: 72HR BETWEEN SAMP AND ANAL	
SD	SAMP SUBM AS DUPLIC FOUND TO DIFFER	
SIL	SAMP INCORRECTLY LABELLED	
SPH	SATURATED PASTE PH REPT:HIGH ORGAN.	
SPL	SEVERAL PEAKS,LARGE,NOT PRIORITY	
SPS	SEVERAL PEAKS,SMALL,NOT PRIORITY	
STA	SAMP TOO OLD FOR RE-ANALYSIS	
STC	SAMP TOO COMPLEX FOR THIS METHOD	
TAF	TRACE AMOUNT FOUND	
U	UNRELIABLE RESULT	
URD	RESULT MAY BE LOW: UNDISOLVE PART.	
WSB	WARNING-HEAVY SILT IN SAMP BIAS RES	
WSD	WRONG SAMP DESCRIPTION ON BOTTLE	
WST	WET SAMP MASS USED:RESLT REPT MG/KG	
X1	DILUTD BY 10 DETECT LINT 10X NORM	
X2	DILUTD BY 100 DETECT LINT 100X NORM	
X3	DILUTD BY 1000 DECT.LINT 1000X NORM	
24P	P-A BOTTLE POSITIVE AFTER 24 HOURS	
48P	P-A BOTTLE POSITIVE AFTER 48 HOURS	
72P	P-A BOTTLE POSITIVE AFTER 72 HOURS	
96P	P-A BOTTLE POSITIVE AFTER 96 HOURS	
99P	P-A BOTTLE POSITIVE AFTER 120 HOURS	

ABBREVIATIONS AND REMARKS USED ON REPORTS

COMPUTED VALUES MAY BE QUALIFIED BY ONE OF THE FOLLOWING REMARKS:

<A VALUE WITH A REMARK WHICH HAS A
 COMMENT CODE OF PT (AS ABOVE) USED IN
 COMPUTATIONS

NOTE: VALUES WITH COMMENT CODE OF PE
 ARE NOT USED IN COMPUTATIONS

REMARK CODES APPEAR TO THE RIGHT OF THE VALUE I.E. 435.56<T

1983 WATER QUALITY DATA REGION 6

1

B.O.W./ SITE: LAKE SUPERIOR
 SAMPLE POINT: INSIDE EASTERN GAP THUNDER BAY
 STATION TYPE: LAKE

STATION ID: 01-0000-001-01

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR

STORET CODE: 02
 001

LAT: 48 26 55.37 LONG: 089 10 45.39 U T M: 16 0338850.0 5368250.0 4 REGION: 06

*=INTERIM TEST-NAME:		FWSADP	FGPROJ	ALKT	ASUT	BOD5	CCNAUR	CCNFUR	CDUT	CLIDUR	COLAP
				ALK	ARSENIC	5 DAY	CYANIDE	CYANIDE	CADMIUM	CHLORIDE	COLOUR
SAMPLE DATE	YMHDD LMT	SAMPLE HOUR	DEPTH	PROJECT	TOTAL	TOT.DEM.	AVAIL	FREE	UNF.TOT.	UNF.REAC	COLOUR
YMHDD	LMT	NUMBER	M	SUB-PROJ	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	APPARENT
				CODE	AS CAC03	AS AS	AS O	AS HCN	AS HCN	AS CD	AS CL-
											HZU
830516	1150	10055	0.30	0101	34.0		1.10	0.001<	0.001<W		2.500
830613		10077	0.30	0101	34.0		1.50				4.500
830705	1045	10100	0.30	0101	40.0	0.0010<	1.00	0.001<	0.001<W	0.0005	5.500
830815	0955	10123	0.30	0101	43.0	0.0010<	1.90			0.0005	8.300
830919	1045	10147	0.30	0101	44.0	0.0010<	1.20	0.001<	0.001<W	0.0005<	5.600
831012	1125	10170	0.30	0101	43.0		0.50				9.400
		MAXIMUM	0.30		44.0		1.90		0.001	0.0005	9.400
		ARITH MEAN	0.30		39.7		1.20		0.001<A	0.0005	5.967
		GEOM MEAN			39.4		1.11		0.001<A		5.478
		MINIMUM	0.30		34.0		0.50		0.001	0.0005	2.500
		STD DEV (GEOM *)			4.6		0.47		0.000<A		2.520
		# SAMP IN STATISTICS	6		6		6		3	2	6
		% SAMP (EXCLUDED)							33		6

*=INTERIM TEST-NAME:		COND25	COU	CRUT	CUUT	DO	FCMF	FEUT	FMPH	FWSTRC	FWTEMP
		CONDUCT.	COBALT	CHROMIUM	COPPER	DISOLVED	FECAL	IRON			WATER
SAMPLE DATE	YMHDD LMT	25C	UNF.TOT.	UNF.TOT.	UNF.TOT.	OXYGEN	COLIFORM	UNF.TOT.	PH	STREAM	TEMP
YMHDD	LMT	UMHO/CM	MG/L	MG/L	MG/L	MG/L	MF	MG/L	FIELD	COND.	DEG.C
		AT 25 C	AS CO	AS CR	AS CU	AS O	CNT	AS FE			
							/100ML				
830516	1150	10055	89.0			12.2	4<		7.5		5.0
830613		10077	100.0			10.2	20		7.2	8	14.0
830705	1045	10100	106.0	0.0020	0.0030	9.8	120	0.2600	7.3		12.0
830815	0955	10123	136.0	0.0020<	0.0060	7.6	30AID	0.2900	7.2		20.0
830919	1045	10147	119.0	0.0020	0.0050	9.1	60AID	0.1100	7.4		13.0
831012	1125	10170	137.0			10.2	60AID				10.5
		MAXIMUM	137.0	0.0020	0.0060	12.2	120	0.2900	7.5		20.0
		ARITH MEAN	114.5	0.0020	0.0047	9.8	58	0.2200	7.3		12.4
		GEOM MEAN	113.1		0.0045	9.8		0.2024	7.3		11.5
		MINIMUM	89.0	0.0020	0.0030	7.6	20	0.1100	7.2		5.0
		STD DEV (GEOM *)	19.6		0.0015	1.5		0.0964	0.1		4.9
		# SAMP IN STATISTICS	6	2	3	3	5	3	5		6
		% SAMP (EXCLUDED)		33			16				

(CONTD)

1983 WATER QUALITY DATA REGION 6

2

B.C.W./ SITE: LAKE SUPERIOR
 SAMPLE POINT: INSIDE EASTERN GAP THUNDER BAY
 STATION TYPE: LAKE

STATION ID: 01-0000-001-01

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR

STORET CODE: 02
 001

LAT: 48 26 55.37 LONG: 089 10 45.39 U T M: 16 0338850.0 5368250.0 4 REGION: 06

*=INTERIM TEST-NAME:		HARDT	MNUT	NIUT	PBUT	PH	PP04FR	PPUT	RSP	RST	TCMF
		HARDNESS	MANGANESE	NICKEL	LEAD		P04	PHOSPHOR			COLIFORM
SAMPLE		TOTAL	UNF.TOT.	UNF.TOT.	UNF.TOT.		FIL.REAC	UNF.TOT.	RESIDUE	RESIDUE	TOTAL
DATE	HOUR	MG/L	MG/L	MG/L	MG/L		MG/L	MG/L	PARTIC.	TOTAL	HF
YYMMDD	LMT	AS CACO3	AS MN	AS NI	AS PB	* PH	AS P	AS P	MG/L	MG/L	CNT
											/100ML
830516	1150	10055	37.000			7.50	0.002	0.015	2.00	80.00	50AID
830613		10077	40.000			7.20	0.002	0.010	4.00	95.00	200AID
830705	1045	10100	44.000	0.016	0.0030	7.60	0.002	0.012	3.00	95.00	600AID
830815	0955	10123	54.000	0.032	0.002	7.30	0.002	0.013	6.00	150.00	110C
830919	1045	10147	47.000	0.008	0.002	7.60	0.001	0.010	2.00	90.00	200AID
831012	1125	10170	53.000			7.20	0.004	0.013	3.00	110.00	250
		MAXIMUM	54.000	0.032	0.0030	7.60	0.004	0.015	6.00	150.00	600
		ARITH MEAN	45.833	0.019	0.002	7.40	0.002	0.012	3.33	103.33	235
		GEOM MEAN	45.403	0.016	0.002	7.40	0.002	0.012	3.09	101.17	179
		MINIMUM	37.000	0.008	0.002	7.20	0.001	0.010	2.00	80.00	50
		STD DEV (GEOM *)	6.853	0.012	0.001	0.19	0.001	0.002	1.51	24.83	2*
		# SAMP IN STATISTICS	6	3	3	1	6	6	6	6	6
		% SAMP (EXCLUDED)				66					

*=INTERIM TEST-NAME:		TCMFBK	TURB	ZNUT
		COLIFORM		ZINC
		TOTAL MF		UNF.TOT.
SAMPLE		BCKGRD		MG/L
DATE	HOUR	CNT	TURB'ITY	AS ZN
YYMMDD	LMT	/100ML	FTU	
830516	1150	10055	420	1.40
830613		10077	2900	3.80
830705	1045	10100	4400	2.30
830815	0955	10123	3600	3.90
830919	1045	10147	25000	2.30
831012	1125	10170	2800	2.70
		MAXIMUM	25000	3.90
		ARITH MEAN	6520	2.73
		GEOM MEAN	3325	2.58
		MINIMUM	420	1.40
		STD DEV (GEOM *)	4*	0.96
		# SAMP IN STATISTICS	6	6
		% SAMP (EXCLUDED)		3

1983 WATER QUALITY DATA REGION 6

3

B.O.W./ SITE: LAKE SUPERIOR
 SAMPLE POINT: OFF MOUTH OF KAHINISTIGUIA RIVER
 STATION TYPE: LAKE

STATION ID: 01-0000-002-01

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR

STORET CODE: 02
 001

LAT: 48 23 30.97 LONG: 089 12 28.51 U T M: 16 0336550.0 5362000.0 4 REGION: 06

*=INTERIM TEST-NAME:		FMSADP	FGPROJ	ALKT	ASUT	BOD5	CDUT	CLIDUR	COLAP	COND25	COUT
				ALK	ARSENIC	5 DAY	CADMIUM	CHLORIDE	COLOUR	CONDUCT.	COBALT
				TOTAL	UNF.TOT.	TOT.DEM.	UNF.TOT.	UNF.REAC	APPARENT	25C	UNF.TOT.
DATE	HOUR	SAMPLE	PROJECT	MG/L	MG/L	MG/L	MG/L	MG/L	HZU	UMHO/CM	MG/L
YYMMDD	LMT	NUMBER	SUB-PROJ	AS CAC03	AS AS	AS O	AS CD	AS CL-		AT 25 C	AS CO
			CODE								
830516	1350	10052	0101	38.0	0.0010<	0.90	0.0005<	6.300	34.000	113.0	0.0020<
830613		10074	0101	42.0		1.70		8.700	76.000	137.0	
830705	1410	10097	0101	56.0	0.0010<	1.20	0.0010<	11.000	47.000	161.0	0.0020<
830815	1337	10120	0101	42.0	0.0010<	0.30	0.0005<	5.400	12.000	114.0	0.0020<
830919	1225	10144	0101	44.0	0.0010<	0.70	0.0005<	3.700	11.000	109.0	0.0020<
831012	1420	10167	0101	43.0		0.30		11.000	18.000	145.0	
		MAXIMUM		56.0		1.70		11.000	76.000	161.0	
		ARITH MEAN		44.2		0.85		7.683	33.000	129.8	
		GEOM MEAN		43.8		0.70		7.140	25.706	128.4	
		MINIMUM		38.0		0.30		3.700	11.000	109.0	
		STD DEV (GEOM *)		6.1		0.54		3.034	25.282	21.1	
		# SAMP IN STATISTICS		6		6		6	6	6	
		% SAMP (EXCLUDED)									

*=INTERIM TEST-NAME:		CRUT	CUUT	DO	FCMF	FEUT	FWPH	FWTEMP	HARDT	MNUT	NIUT
		CHROMIUM	COPPER	DISOLVED	FECAL	IRON			HARDNESS	MANGANESE	NICKEL
		UNF.TOT.	UNF.TOT.	OXYGEN	COLIFORM	UNF.TOT.		WATER	TOTAL	UNF.TOT.	UNF.TOT.
DATE	HOUR	MG/L	MG/L	MG/L	HF	MG/L		TEMP	MG/L	MG/L	MG/L
YYMMDD	LMT	AS CR	AS CU	AS O	CNT	AS FE	PH	DEG.C	AS CAC03	AS MN	AS NI
					/100ML		FIELD				
830516	1350	0.0040	0.0020	11.4	12	0.4500	7.2	5.0	45.000	0.014	0.002
830613			0.0030	6.3	500AID	0.5200	6.9	14.0	47.000	0.036	
830705	1410	0.0040	0.0030	8.9	800AID	0.8600	7.5	13.0	62.000	0.029	0.0020<
830815	1337	0.0050	0.0010	9.4	40AID	0.0950	7.5	18.5	52.000	0.007	0.003
830919	1225	0.0030	0.0020	9.2	10<	0.1100	7.2	13.0	47.000	0.005	0.002 <
831012	1420		0.0010	9.3	50AID	0.2900		10.0	51.000	0.016	
		MAXIMUM	0.0050	11.4	800	0.8600	7.5	18.5	62.000	0.036	0.003
		ARITH MEAN	0.0040	9.1	280	0.3875	7.3	12.2	50.667	0.018	0.002
		GEOM MEAN	0.0039	9.0		0.2912	7.3	11.4	50.377	0.014	
		MINIMUM	0.0030	6.3	12	0.0950	6.9	5.0	45.000	0.005	0.002
		STD DEV (GEOM *)	0.0008	1.6		0.2887	0.3	4.5	6.154	0.012	
		# SAMP IN STATISTICS	4	6	5	6	5	6	6	6	2
		% SAMP (EXCLUDED)			16						50

(CONTD)

1983 WATER QUALITY DATA REGION 6

4

B.O.W./ SITE: LAKE SUPERIOR
 SAMPLE POINT: OFF MOUTH OF KAMINISTIGUIA RIVER
 STATION TYPE: LAKE

STATION ID: 01-0000-002-01

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR

STORET CODE: 02
 001

LAT: 48 23 30.97 LONG: 089 12 28.51 U T M: 16 0336550.0 5362000.0 4 REGION: 06

*INTERIM		TEST-NAME:	PBUT	PH	PP04FR	PPUT	RSP	RST	TCMF	TCMFBK	TURB	ZNUT
			LEAD		P04	PHOSPHOR			COLIFORM	COLIFORM		ZINC
SAMPLE		UNF.TOT.			FIL.REAC	UNF.TOT.	RESIDUE	RESIDUE	TOTAL	TOTAL MF		UNF.TOT.
DATE	HR	MG/L			MG/L	MG/L	PARTIC.	TOTAL	MF	BCKGRD	TURB*ITY	MG/L
YYMMDD	LMT	AS PB		PH	AS P	AS P	MG/L	MG/L	CNT	CNT	FTU	AS ZN
830516	1350	10052	0.004	7.70	0.003	0.021	4.00	110.00	960	170	3.80	0.0040
830613		10074		7.00	0.003	0.044	8.00	110.00	180000	10000<	3.80	0.0050
830705	1410	10097	0.003<	7.50	0.005	0.032	7.00	130.00	35000	22000	6.10	0.0050
830815	1337	10120	0.004	7.70	0.002	0.008	2.00	100.00	5100	400AID	1.10	0.0010<
830919	1225	10144	0.003<	7.70	0.001	0.011	2.00	80.00	100<	1800	1.40	0.0010<
831012	1420	10167		7.40	0.004	0.017	3.00	120.00	340	1100	2.80	0.003
		MAXIMUM	0.004	7.70	0.005	0.044	8.00	130.00	180000	22000	6.10	0.0050
		ARITH MEAN	0.004	7.50	0.003	0.022	4.33	108.33	44280	5094	3.17	0.004
		GEOM MEAN		7.50	0.003	0.019	3.73	107.11			2.69	
		MINIMUM	0.004	7.00	0.001	0.008	2.00	80.00	340	170	1.10	0.003
		STD DEV (GEOM *)		0.28	0.001	0.014	2.58	17.22			1.84	
		# SAMP IN STATISTICS	2	6	6	6	6	6	5	5	6	4
		% SAMP (EXCLUDED)	50						16	16		33

1983 WATER QUALITY DATA REGION 6

5

B.O.W./ SITE: LAKE SUPERIOR
 SAMPLE POINT: NEAR PULP MILL MISSION BAY THUNDER BAY
 STATION TYPE: LAKE

STATION ID: 01-0000-003-01

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR

STORET CODE: 02
 001

LAT: 48 20 59.66 LONG: 089 12 21.97 U T M: 16 0336550.0 5357325.0 4 REGION: 06

*=INTERIM TEST-NAME:		FMSADP	FGPROJ	ALKT	ALUT	ASUT	BOD5	CDUT	CLIDUR	COLAP	COND25	
SAMPLE DATE	HOUR	SAMPLE NUMBER	SAMPLE DEPTH	PROJECT SUB-PROJ CODE	ALK TOTAL MG/L AS CACO3	ALUMINUM UNF.TOT. MG/L AS AL	ARSENIC UNF.TOT. MG/L AS AS	5 DAY TOT.DEM. MG/L AS O	CADMIUM UNF.TOT. MG/L AS CD	CHLORIDE UNF.REAC MG/L AS CL-	COLOUR APPARENT HZU	CONDUCT. 25C UMHO/CM AT 25 C
830516	1240	10053	0.30	0101	43.0	0.320	0.0010	4.40	0.0005<	9.700	75.000	161.0
830613		10075	0.30	0101	44.0			2.50		5.900	75.000	138.0
830705	1140	10098	0.30	0101	47.0	0.920	0.0010<	3.30	0.0010	4.400	46.000	124.0
830815	1135	10121	0.30	0101	43.0	0.180	0.0010<	4.00	0.0005	5.100	54.000	131.0
830919	1310	10145	0.30	0101	44.0	0.150	0.0010<	1.10	0.0005<	2.900	20.000	112.0
831012	1215	10168	0.30	0101	44.0			1.10		4.300	33.000	124.0

MAXIMUM		0.30			47.0	0.920	0.0010	4.40	0.0010	9.700	75.000	161.0
ARITH MEAN		0.30			44.2	0.392	0.0010	2.73	0.0007	5.383	50.500	131.7
GEOM MEAN					44.1	0.299		2.37		5.021	45.793	130.8
MINIMUM		0.30			43.0	0.150	0.0010	1.10	0.0005	2.900	20.000	112.0
STD DEV (GEOM *)					1.5	0.359		1.42		2.336	22.224	16.8
# SAMP IN STATISTICS		6			6	4	1	6	2	6	6	6
% SAMP (EXCLUDED)							75		50			

*=INTERIM TEST-NAME:		COBT	CRUT	CUUT	DO	FCMF	FEUT	FVPH	FWTEMP	HARDT	HNUT	
SAMPLE DATE	HOUR	SAMPLE NUMBER	COBALT UNF.TOT. MG/L AS CO	CHROMIUM UNF.TOT. MG/L AS CR	COPPER UNF.TOT. MG/L AS CU	DISOLVED OXYGEN MG/L AS O	FECAL COLIFORM HF CNT /100ML	IRON UNF.TOT. MG/L AS FE	PH FIELD	WATER TEMP DEG.C	HARDNESS TOTAL MG/L AS CACO3	MANGANESE UNF.TOT. MG/L AS MN
830516	1240	10053	0.0020<	0.0130	0.0030	9.0	50AID	0.7400	7.3	7.0	47.000	0.045
830613		10075				6.5	210		7.0	12.5	48.000	
830705	1140	10098	0.0020<	0.0100	0.0040	8.3	1700C	1.7000	7.7	12.0	48.000	0.036
830815	1135	10121	0.0020<	0.0090	0.0020	4.2	2000AID	0.5900	6.9	19.5	45.000	0.041
830919	1310	10145	0.0020	0.0040	0.0020	9.1	100<	0.3000	7.2	11.5	47.000	0.015
831012	1215	10168				9.1	400AID			10.0	48.000	
MAXIMUM		0.0020	0.0130	0.0040	9.1	2000	1.7000	7.7	19.5	48.000	0.045	
ARITH MEAN		0.0020	0.0090	0.0027	7.7	872	0.8325	7.2	12.1	47.167	0.034	
GEOM MEAN			0.0083	0.0026	7.4		0.6869	7.2	11.5	47.154	0.032	
MINIMUM		0.0020	0.0040	0.0020	4.2	50	0.3000	6.9	7.0	45.000	0.015	
STD DEV (GEOM *)			0.0037	0.0010	2.0		0.6065	0.3	4.1	1.169	0.013	
# SAMP IN STATISTICS		1	4	4	6	5	4	5	6	6	4	
% SAMP (EXCLUDED)		75				16						

(CONT'D)

1983 WATER QUALITY DATA REGION 6

6

B.O.W./ SITE: LAKE SUPERIOR
 SAMPLE POINT: NEAR PULP MILL MISSION BAY THUNDER BAY
 STATION TYPE: LAKE

STATION ID: 01-0000-003-01

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR

STORET CODE: 02
 001

LAT: 48 20 59.66 LONG: 089 12 21.97 U T M: 16 0336550.0 5357325.0 4 REGION: 06

*=INTERIM TEST-NAME:		NIUT	PBUT	PH	PP04FR	PPUT	RSP	RST	TCMF	TCMFBK	TURB	
		NICKEL	LEAD		P04	PHOSPHOR			COLIFORM	COLIFORM		
SAMPLE		UNF.TOT.	UNF.TOT.		FIL.REAC	UNF.TOT.	RESIDUE	RESIDUE	TOTAL	TOTAL MF		
DATE	HOUR	MG/L	MG/L		MG/L	MG/L	PARTIC.	TOTAL	MF	BCKGRD		
YYMMDD	LMT	AS NI	AS PB	PH	AS P	AS P	MG/L	MG/L	CNT	CNT	TURB'ITY	
									/100ML	/100ML	FTU	
830516	1240	10053	0.003	0.003<	7.30	0.004	0.040	7.00	85.00	3800	1700	6.20
830613		10075			6.90	0.003	0.031	8.00	150.00	13000	2300	5.30
830705	1140	10098	0.0020	0.003<	7.30	0.006	0.038	20.00	120.00	280000	90000AID	18.00
830815	1135	10121	0.002	0.003<	7.00	0.002	0.034	7.00	140.00	76000	27000	5.00
830919	1310	10145	0.002	0.003	7.60	0.002	0.015	5.00	70.00	1000AID	6000AID	3.20
831012	1215	10168			7.30	0.003	0.026	10.00	120.00	7500	6000	6.80
	MAXIMUM	0.003	0.003	7.60	0.006	0.040	20.00	150.00	280000	90000	18.00	
	ARITH MEAN	0.002	0.003	7.23	0.003	0.031	9.50	114.17	63550	22167	7.42	
	GEOM MEAN	0.002		7.23	0.003	0.029	8.55	110.28	14108	8363	6.33	
	MINIMUM	0.0020	0.003	6.90	0.002	0.015	5.00	70.00	1000	1700	3.20	
	STD DEV (GEOM *)	0.000		0.25	0.002	0.009	5.39	31.05	8*	5*	5.33	
	# SAMP IN STATISTICS	4	1	6	6	6	6	6	6	6	6	
	% SAMP (EXCLUDED)		75									

*=INTERIM TEST-NAME:		ZNUT
		ZINC
SAMPLE		UNF.TOT.
DATE	HOUR	MG/L
YYMMDD	LMT	AS ZN
830516	1240	10053
830705	1140	10098
830815	1135	10121
830919	1310	10145
	MAXIMUM	0.0080
	ARITH MEAN	0.0045
	GEOM MEAN	0.0040
	MINIMUM	0.0020
	STD DEV (GEOM *)	0.0025
	# SAMP IN STATISTICS	4
	% SAMP (EXCLUDED)	

1983 WATER QUALITY DATA REGION 6

7

B.O.W./ SITE: LAKE SUPERIOR
 SAMPLE POINT: NEAR PROV.MILL,EASTERN GAP THUNDER BAY
 STATION TYPE: LAKE

STATION ID: 01-0000-004-01

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR

STORET CODE: 02
 001

LAT: 48 27 00.82 LONG: 089 10 13.98 U T M: 16 0339500.0 5368400.0 4 REGION: 06

*INTERIM TEST-NAME:		FWSADP	FGPROJ	ALKT	ALUT	ASUT	BOD5	CCNAUR	CCNFUR	CDUT	CLIDUR	
				ALK	ALUMINUM	ARSENIC	BOD	CYANIDE	CYANIDE	CADMIUM	CHLORIDE	
SAMPLE DATE	HOUR	SAMPLE	SAMPLE	PROJECT	UNF.TOT.	UNF.TOT.	5 DAY	UNF.REAC	UNF.REAC	UNF.TOT.	UNF.REAC	
YYMMDD	LMT	NUMBER	DEPTH	SUB-PROJ	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	
			M	CODE	AS CAC03	AS AL	AS AS	AS O	AS HCN	AS HCN	AS CD	
											AS CL-	
830516	1120	10054	0.30	0101	33.0	0.160	0.0010<	3.10	0.001<	0.001<M	0.0005<	2.600
830613		10076	0.30	0101	33.0			1.70				4.500
830705	1030	10099	0.30	0101	44.0	0.150	0.0010<	3.00	0.001<	0.001<M	0.0010	7.600
830815	1005	10122	0.30	0101	42.0	0.360	0.0010<	24.00			0.0005	8.300
830919	1035	10146	0.30	0101	44.0	0.090	0.0010<	1.70	0.001<	0.001<M	0.0005<	5.400
831012	1120	10169	0.30	0101	41.0			5.90				8.700
		MAXIMUM	0.30		44.0	0.360		24.00		0.001	0.0010	8.700
		ARITH MEAN	0.30		39.5	0.190		6.57		0.001<A	0.0007	6.183
		GEOM MEAN			39.2	0.167		3.95		0.001<A		5.710
		MINIMUM	0.30		33.0	0.090		1.70		0.001	0.0005	2.600
		STD DEV (GEOM *)			5.2	0.117		8.68		0.000<A		2.413
		# SAMP IN STATISTICS	6		6	4		6		3	2	6
		% SAMP (EXCLUDED)									50	

*INTERIM TEST-NAME:		COLAP	COND25	COUT	CRUT	CUUT	DO	FCMF	FEUT	FVPH	FWTEMP	
								FECAL	IRON			
SAMPLE DATE	HOUR	SAMPLE	COLOUR	CONDUCT.	COBALT	CHROMIUM	COPPER	DISOLVED	COLIFORM	UNF.TOT.	PH	
YYMMDD	LMT	NUMBER	APPARENT	25C	UNF.TOT.	UNF.TOT.	UNF.TOT.	OXYGEN	MF	MG/L	FIELD	
			HZU	UMHQ/CM	MG/L	MG/L	MG/L	MG/L	CNT	AS FE		
				AT 25 C	AS CO	AS CR	AS CU	AS O	/100ML		TEMP	
											DEG.C	
830516	1120	10054	39.000	98.0	0.0020<	0.0060	0.0030	11.5	4	0.2400	7.3	5.0
830613		10076	55.000	99.0				10.4	8		6.9	13.0
830705	1030	10099	18.000	130.0	0.0020<	0.0020<	0.0020	9.0	100	0.2400	6.7	14.0
830815	1005	10122	28.000	229.0	0.0020<	0.0070	0.0040	7.8	80AID	0.3100	6.6	19.5
830919	1035	10146	12.000	122.0	0.0020<	0.0030	0.0020	8.7	90AID	0.1300	7.2	12.5
831012	1120	10169	40.000	145.0				9.6	50AID			11.0
		MAXIMUM	55.000	229.0		0.0070	0.0040	11.5	100	0.3100	7.3	19.5
		ARITH MEAN	32.000	137.2		0.0053	0.0027	9.5	55	0.2300	6.9	12.5
		GEOM MEAN	28.348	131.2			0.0026	9.4	32	0.2195	6.9	11.6
		MINIMUM	12.000	98.0		0.0030	0.0020	7.8	4	0.1300	6.6	5.0
		STD DEV (GEOM *)	15.837	48.5			0.0010	1.3	4*	0.0744	0.3	4.7
		# SAMP IN STATISTICS	6	6		3	4	6	6	4	5	6
		% SAMP (EXCLUDED)				25						

(CONTD)

1983 WATER QUALITY DATA REGION 6

8

B.O.W./ SITE: LAKE SUPERIOR
 SAMPLE POINT: NEAR PROV.MILL,EASTERN GAP THUNDER BAY
 STATION TYPE: LAKE

STATION ID: 01-0000-004-01

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR

STORET CODE: 02
 001

LAT: 48 27 00.82 LONG: 089 10 13.98 U T M: 16 0339500.0 5368400.0 4 REGION: 06

*=INTERIM TEST-NAME:		HARDT	MNUT	NIUT	PBUT	PH	PP04FR	PPUT	RSP	RST	TCHF COLIFORM TOTAL HF CNT /100HL	
		HARDNESS TOTAL MG/L AS CACO3	MANGANESE UNF.TOT. MG/L AS MN	NICKEL UNF.TOT. MG/L AS NI	LEAD UNF.TOT. MG/L AS PB	PH	PO4 FIL.REAC MG/L AS P	PHOSPHOR UNF.TOT. MG/L AS P	RESIDUE PARTIC. MG/L	RESIDUE TOTAL MG/L		
SAMPLE DATE YYMMDD	DATE HOUR LMT	SAMPLE NUMBER										
830516	1120	10054	39.000	0.016	0.003	0.003<	7.30	0.002	0.014	2.00	110.00	10<
830613		10076	40.000				7.20	0.002	0.011	4.00	85.00	150C
830705	1030	10099	50.000	0.014	0.0030	0.003<	7.30	0.002	0.014	4.00	110.00	400AID
830815	1005	10122	80.000	0.059	0.003	0.034	6.90	0.008	0.024	15.00	200.00	100C
830919	1035	10146	49.000	0.011	0.002 <	0.003<	7.40	0.002	0.011	3.00	140.00	200C
831012	1120	10169	56.000				7.10	0.003	0.024	7.00	130.00	300AID
MAXIMUM		80.000	0.059	0.003	0.034	7.40	0.008	0.024	15.00	200.00	400	
ARITH MEAN		52.333	0.025	0.003	0.034	7.20	0.003	0.016	5.83	129.17	230	
GEOM MEAN		50.769	0.020			7.20	0.003	0.015	4.65	124.61		
MINIMUM		39.000	0.011	0.003	0.034	6.90	0.002	0.011	2.00	85.00	100	
STD DEV (GEOM *)		15.002	0.023			0.18	0.002	0.006	4.79	39.55		
# SAMP IN STATISTICS		6	4	3	1	6	6	6	6	6	5	
% SAMP (EXCLUDED)				25	75						16	

*=INTERIM TEST-NAME:		TCHFBK COLIFORM TOTAL HF BCKGRD CNT /100ML	TURB TURB'ITY FTU	ZNUT ZINC UNF.TOT. MG/L AS ZN
SAMPLE DATE YYMMDD	DATE HOUR LMT	SAMPLE NUMBER		
830516	1120	10054	420	2.10
830613		10076	3000	3.30
830705	1030	10099	20000	4.20
830815	1005	10122	80000	16.00
830919	1035	10146	70000	2.70
831012	1120	10169	20000	22.00
MAXIMUM		80000	22.00	0.0660
ARITH MEAN		32237	8.38	0.0237
GEOM MEAN		11888	5.50	0.0142
MINIMUM		420	2.10	0.0040
STD DEV (GEOM *)		8*	8.47	0.0285
# SAMP IN STATISTICS		6	6	4
% SAMP (EXCLUDED)				

STORET CODE: 02
001

*=INTERIM	TEST-NAME:	COND25	COUT	CRUT	CUUT	DO	FCMF	FEUT	FwPH	FwSTRC	FwTEMP
SAMPLE		CONDUCT.	COBALT	CHROMIUM	COPPER	DISOLVED	FECAL	IRON			
DATE	HOURL	25C	UNF.TOT.	UNF.TOT.	UNF.TOT.	OXYGEN	COLIFORM	UNF.TOT.			WATER
YYMMDD	LMT	UMHO/CH	MG/L	MG/L	MG/L	MG/L	MF	MG/L	PH	STREAM	TEMP
	SAMPLE	AT 25 C	AS CO	AS CR	AS CU	AS O	CNT	AS FE	FIELD	COND.	DEG.C
	NUMBER						/100ML				
830516	10056	96.0	0.0020<	0.0020<	0.0010	12.8	4<	0.1200	7.5		2.0
830613	10078	107.0				10.1	4<		6.9	8	11.0
830705	1105	10101	98.0	0.0020<	0.0040	12.1	4<	0.0440	6.4		4.5
830815	1022	10124	103.0	0.0020<	0.0110	9.2	20AID	0.0550	7.1		17.0
830919	1015	10148	106.0	0.0020<	0.0050	9.8	10<	0.1100	6.9		10.5
831012	1100	10171	117.0			10.8	10AID		6.9		9.5
	MAXIMUM	117.0		0.0110	0.0020	12.8	20	0.1200	7.5		17.0
	ARITH MEAN	104.5		0.0067	0.0012	10.8	15	0.0822	6.9		9.1
	GEOM MEAN	104.3			0.0012	10.7		0.0752	6.9		7.4
	MINIMUM	96.0		0.0040	0.0010	9.2	10	0.0440	6.4		2.0
	STD DEV (GEOM *)	7.5			0.0005	1.4		0.0383	0.4		5.3
	# SAMP IN STATISTICS	6		3	4	6	2	4	6		6
	% SAMP (EXCLUDED)			25			66				

(C O N T D)

1983 WATER QUALITY DATA REGION 6

10

B.O.W./ SITE: LAKE SUPERIOR
 SAMPLE POINT: NEAR ABITIBI THUNDER BAY PAPER MILL SLIP
 STATION TYPE: LAKE

STATION ID: 01-0000-005-01

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR

STORET CODE: 02
 001

LAT: 48 28 11.25 LONG: 089 09 31.93 U T M: 16 0340425.0 5370550.0 4 REGION: 06

*INTERIM TEST-NAME:		HARDT	MNUT	NIUT	PBUT	PH	PP04FR	PPUT	RSP	RST	TCHF COLIFORM
		HARDNESS	MANGANSE	NICKEL	LEAD		PO4	PHOSPHOR			TOTAL
SAMPLE DATE	HOUR	TOTAL	UNF.TOT.	UNF.TOT.	UNF.TOT.		FIL.REAC	UNF.TOT.	RESIDUE	RESIDUE	MF
YYMMDD	LMT	AS CACO3	MG/L AS MN	MG/L AS NI	MG/L AS PB	PH	MG/L AS P	MG/L AS P	PARTIC.	TOTAL	CNT
									MG/L	MG/L	/100ML
830516		10056 41.000	0.006	0.002 <	0.003<	7.60	0.002	0.010	1.00	75.00	10<
830613		10078 46.000				7.50	0.001	0.006	1.00	60.00	530
830705	1105	10101 44.000	0.001	0.0020<	0.003<	7.60	0.001	0.007	2.00	75.00	10AID
830815	1022	10124 47.000	0.004	0.002 <	0.003	7.70	0.002	0.005	3.00	65.00	40AID
830919	1015	10148 45.000	0.008	0.002 <	0.003<	7.50	0.001	0.008	1.00	95.00	1700
831012	1100	10171 48.000				7.40	0.003	0.027	5.00	95.00	1000
	MAXIMUM	48.000	0.008		0.003	7.70	0.003	0.027	5.00	95.00	1700
	ARITH MEAN	45.167	0.005		0.003	7.55	0.002	0.010	2.17	77.50	656
	GEOM MEAN	45.108	0.004			7.55	0.002	0.009	1.76	76.34	
	MINIMUM	41.000	0.001		0.003	7.40	0.001	0.005	1.00	60.00	10
	STD DEV (GEOM *)	2.483	0.003			0.10	0.001	0.008	1.60	14.75	
	# SAMP IN STATISTICS	6	4		1	6	6	6	6	6	5
	% SAMP (EXCLUDED)				75						16

*INTERIM TEST-NAME:		TCHFBK	TURB	ZNUT
		COLIFORM		ZINC
SAMPLE DATE	HOUR	TOTAL MF		UNF.TOT.
YYMMDD	LMT	BCKGRD	TURB'ITY	MG/L
		CNT	FTU	AS ZN
		/100ML		
830516		10056 170	0.70	0.0030
830613		10078 2000	0.95	
830705	1105	10101 210	0.60	0.0030
830815	1022	10124 580	0.55	0.0020
830919	1015	10148 3000	1.10	0.0010
831012	1100	10171 3000	4.70	
	MAXIMUM	3000	4.70	0.0030
	ARITH MEAN	1493	1.43	0.0022
	GEOM MEAN	848	1.02	0.0021
	MINIMUM	170	0.55	0.0010
	STD DEV (GEOM *)	4*	1.61	0.0010
	# SAMP IN STATISTICS	6	6	4
	% SAMP (EXCLUDED)			

1983 WATER QUALITY DATA REGION 6

11

B.O.W./ SITE: LAKE SUPERIOR
 SAMPLE POINT: AT ABITIBI THUNDER BAY PAPER MILL DITCH
 STATION TYPE: LAKE

STATION ID: 01-0000-006-01

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR

STORET CODE: 02
 001

LAT: 48 27 56.39 LONG: 089 09 47.13 U T M: 16 0340100.0 5370100.0 4 REGION: 06

*=INTERIM TEST-NAME:		FWSADP	FGPROJ	ALKT	ALUT	ASUT	BOD5	CCNAUR	CCNFUR	CDUT	CLIDUR
							BOD	CYANIDE	CYANIDE		
							5 DAY	AVAIL	FREE	CADMIUM	CHLORIDE
							TOT. DEM.	UNF. REAC	UNF. REAC	UNF. TOT.	UNF. REAC
							MG/L	MG/L	MG/L	MG/L	MG/L
							AS O	AS HCN	AS HCN	AS CD	AS CL-
SAMPLE DATE	YEAR MONTH DAY	NUMBER	DEPTH M	PROJECT SUB-PROJ CODE	ALK TOTAL MG/L AS CAC03	ALUMINUM UNF. TOT. MG/L AS AL	ARSENIC UNF. TOT. MG/L AS AS				
830516	1110	10057	0.30	0101	41.0	0.060	0.0010<	0.50	0.001<	0.001<W	1.700
830613		10079	0.30	0101	41.0			7.60			2.100
830705	1055	10102		0101					0.001<W	0.001<W	
		10102	0.30		43.0	0.080	0.001 <	11.00	0.001<W	0.001<W	3.000
830815	1015	10125	0.30	0101	41.0	0.010<	0.0010<	0.10		0.0005	2.000
830919	1020	10149	0.30	0101	42.0	0.080	0.0010<	15.00	0.001<	0.001<W	2.500
831012	1110	10172	0.30	0101	42.0			1.10			5.000
		MAXIMUM	0.30		43.0	0.080		15.00	0.001	0.001	5.000
		ARITH MEAN	0.30		41.7	0.073		5.88	0.001<A	0.001<A	2.717
		GEOM MEAN			41.7			2.03	0.001<A	0.001<A	2.539
		MINIMUM	0.30		41.0	0.060		0.10	0.001	0.001	1.700
		STD DEV (GEOM *)			0.8			6.29	0.000<A	0.000<A	1.206
		# SAMP IN STATISTICS	6		6	3	6	2	4	2	6
		% SAMP (EXCLUDED)				25		50		50	
*=INTERIM TEST-NAME:		COLAP	COND25	COUT	CRUT	CUUT	DO	FCHF	FEUT	FVPH	FWTEMP
								FECAL			
								COLIFORM	IRON		
								MF	UNF. TOT.	PH	WATER
								CNT	MG/L AS FE	FIELD	TEMP
								/100ML			DEG. C
SAMPLE DATE	YEAR MONTH DAY	NUMBER	COLOUR APPARENT HZU	CONDUCT. 25C UMHO/CM AT 25 C	COBALT UNF. TOT. MG/L AS CO	CHROMIUM UNF. TOT. MG/L AS CR	COPPER UNF. TOT. MG/L AS CU	DISSOLVED OXYGEN MG/L AS O			
830516	1110	10057	9.000	98.0	0.0020<	0.0040	0.0020	13.0	4<	0.080	2.0
830613		10079	15.000	109.0				12.8	8		10.0
830705	1055	10102	26.000	112.0	0.003	0.002 <	0.002	11.2	8	0.140	5.3
830815	1015	10125	6.000	100.0	0.0020<	0.0110	0.0010	9.2	10<	0.0700	17.5
830919	1020	10149	21.000	124.0	0.0020	0.0020	0.0020	9.3	10AID	0.140	10.5
831012	1110	10172	12.000	118.0				10.8	20AID		9.5
		MAXIMUM	26.000	124.0	0.003	0.0110	0.0020	13.0	20	0.140	17.5
		ARITH MEAN	14.833	110.2	0.002	0.0057	0.002	11.0	11	0.107	9.1
		GEOM MEAN	13.207	109.8			0.002	10.9		0.102	7.5
		MINIMUM	6.000	98.0	0.0020	0.0020	0.0010	9.2	8	0.0700	2.0
		STD DEV (GEOM *)	7.521	10.1			0.000	1.6		0.038	5.3
		# SAMP IN STATISTICS	6	6	2	3	4	6	4	5	6
		% SAMP (EXCLUDED)			50	25			33		

(C O N T D)

1983 WATER QUALITY DATA REGION 6

12

B.O.W./ SITE: LAKE SUPERIOR
 SAMPLE POINT: AT ABITIBI THUNDER BAY PAPER MILL DITCH
 STATION TYPE: LAKE

STATION ID: 01-0000-006-01

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR

STORET CODE: 02
 001

LAT: 48 27 56.39 LONG: 089 09 47.13 U T M: 16 0340100.0 5370100.0 4 REGION: 06

*=INTERIM TEST-NAME:		HARDT	MNUT	NIUT	PBUT	PH	PP04FR	PPUT	RSP	RST	TCHF	
		HARDNESS	MANGANESE	NICKEL	LEAD		PO4	PHOSPHOR			COLIFORM	
SAMPLE		TOTAL	UNF.TOT.	UNF.TOT.	UNF.TOT.		FIL.REAC	UNF.TOT.	RESIDUE	RESIDUE	TOTAL	
DATE	HOUR	MG/L	MG/L	MG/L	MG/L		MG/L	MG/L	PARTIC.	TOTAL	MF	
YYMMDD	LMT	AS CAC03	AS MN	AS NI	AS PB	PH	AS P	AS P	MG/L	MG/L	CNT	
											/100ML	
830516	1110	10057	45.000	0.003	0.002<	0.003<	7.30	0.002	0.006	1.00	70.00	10<
830613		10079	46.000				7.50	0.001<	0.007	2.00	110.00	1500
830705	1055	10102	46.000	0.034	0.002<	0.003<	7.00	0.002	0.030	15.00	130.00	9000AID
830815	1015	10125	44.000	0.006	0.002<	0.003<	7.70	0.002	0.005	2.00	100.00	20AID
830919	1020	10149	47.000	0.034	0.002<	0.003<	7.10	0.002	0.018	3.00	160.00	14700C
831012	1110	10172	48.000				7.50	0.003	0.012	5.00	95.00	700
		MAXIMUM	48.000	0.034			7.70	0.003	0.030	15.00	160.00	14700
		ARITH MEAN	46.000	0.019			7.35	0.002	0.013	4.67	110.83	5184
		GEOM MEAN	45.982	0.012			7.35		0.011	3.11	107.25	
		MINIMUM	44.000	0.003			7.00	0.002	0.005	1.00	70.00	20
		STD DEV (GEOM *)	1.414	0.017			0.27		0.010	5.24	31.05	
		# SAMP IN STATISTICS	6	4			6	5	6	6	6	5
		% SAMP (EXCLUDED)						16				16

*=INTERIM TEST-NAME:		TCHFBK	TURB	ZNUT
		COLIFORM		ZINC
		TOTAL MF		UNF.TOT.
SAMPLE		BCKGRD		MG/L
DATE	HOUR	CNT	TURB'ITY	AS ZN
YYMMDD	LMT	/100ML	FTU	
830516	1110	10057	40	0.0010<
830613		10079	13000	
830705	1055	10102	4.00	0.004
830815	1015	10125	380	0.0010<
830919	1020	10149	80000	0.0040
831012	1110	10172	2100	
		MAXIMUM	80000	0.0040
		ARITH MEAN	19104	0.004
		GEOM MEAN	2015	
		MINIMUM	40	0.004
		STD DEV (GEOM *)	19*	
		# SAMP IN STATISTICS	5	2
		% SAMP (EXCLUDED)		50

1983 WATER QUALITY DATA REGION 6

13

B.O.W./ SITE: LAKE SUPERIOR
 SAMPLE POINT: 3.5 MI.E.OF WELCOME ISL.LIGHTHOUSE
 STATION TYPE: LAKE

STATION ID: 01-0000-007-01

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR

STORET CODE: 02
 001

LAT: 48 23 47.27 LONG: 089 05 09.06 U T M: 16 0345600.0 5362250.0 4 REGION: 06

*INTERIM TEST-NAME:		FWSADP	FGPROJ	ALKT	ASUT	BOD5	CDUT	CLIDUR	COLAP	COND25	COUT	
SAMPLE DATE	HOUR	SAMPLE NUMBER	SAMPLE DEPTH	PROJECT SUB-PROJ	ALK TOTAL	ARSENIC UNF.TOT.	5 DAY TOT.DEM.	CADMIUM UNF.TOT.	CHLORIDE UNF.REAC	COLOUR APPARENT	CONDUCT. 25C	COBALT UNF.TOT.
YYMMDD	LMT		H	CODE	MG/L AS CAC03	MG/L AS AS	MG/L AS O	MG/L AS CD	MG/L AS CL-	HZU	UMHO/CM AT 25 C	MG/L AS CO
830516	1040	10058	0.30	0101	42.0	0.0010<	0.20	0.0006	1.600	5.000	100.0	0.0020<
830613		10080	0.30	0101	42.0		0.90	0.0005<	1.700	7.000	99.0	0.0020<
830705	1120	10103	0.30	0101	44.0	0.0010<	0.50	0.0005<	2.000	4.000	99.0	0.0020<
830815	1033	10126	0.30	0101	42.0	0.0010<	0.10	0.0005	2.000	5.000	100.0	0.0020<
830919	0950	10150	0.30	0101	42.0	0.0010<	0.60	0.0005<	1.800	6.000	100.0	0.0020<
831012	1045	10173	0.30	0101	41.0		0.10		1.800	4.000	102.0	

MAXIMUM	0.30		44.0		0.90	0.0006	2.000	7.000	102.0
ARITH MEAN	0.30		42.2		0.40	0.0005	1.817	5.167	100.0
GEOM MEAN			42.2		0.29		1.811	5.061	100.0
MINIMUM	0.30		41.0		0.10	0.0005	1.600	4.000	99.0
STD DEV (GEOM *)			1.0		0.32		0.160	1.169	1.1
# SAMP IN STATISTICS	6		6		6	2	6	6	6
% SAMP (EXCLUDED)						60			

*INTERIM TEST-NAME:		CRUT	CUUT	DO	FCHF	FEUT	FMPH	FWTEMP	HARDT	MNUT	NIUT	
SAMPLE DATE	HOUR	CHROMIUM UNF.TOT.	COPPER UNF.TOT.	DISOLVED OXYGEN	FECAL COLIFORM	IRON UNF.TOT.		WATER TEMP	HARDNESS TOTAL	MANGANESE UNF.TOT.	NICKEL UNF.TOT.	
YYMMDD	LMT	MG/L AS CR	MG/L AS CU	MG/L AS O	MF CNT /100ML	MG/L AS FE	PH FIELD	DEG.C	MG/L AS CAC03	MG/L AS MN	MG/L AS NI	
830516	1040	10058	0.0050	0.0030	13.5	4<	0.0940	7.5	1.0	43.000	0.002	0.002 <
830613		10080	0.0020<	0.0020	13.3	4<	0.0360	7.4	8.0	44.000	0.002	0.002 <
830705	1120	10103	0.0030	0.0030	11.6	4<	0.0180	7.2	7.5	45.000	0.001	0.0020<
830815	1033	10126	0.0020	0.0010	9.8	4<	0.0350	7.3	18.0	44.000	0.002	0.003
830919	0950	10150	0.0030	0.0020	9.7	4<	0.0120	6.9	12.0	45.000	0.001	0.002 <
831012	1045	10173			11.6	4<		7.0	9.5	44.000		

MAXIMUM	0.0050	0.0030	13.5		0.0940	7.5	18.0	45.000	0.002	0.003
ARITH MEAN	0.0032	0.0022	11.6		0.0390	7.2	9.3	44.167	0.002	0.003
GEOM MEAN		0.0020	11.5		0.0303	7.2	7.1	44.161	0.002	
MINIMUM	0.0020	0.0010	9.7		0.0120	6.9	1.0	43.000	0.001	0.003
STD DEV (GEOM *)		0.0008	1.6		0.0325	0.2	5.6	0.753	0.001	
# SAMP IN STATISTICS	4	5	6		5	6	6	6	5	1
% SAMP (EXCLUDED)	20									80

(C O N T D)

11

1983 WATER QUALITY DATA REGION 6

14

B.O.W./ SITE: LAKE SUPERIOR
 SAMPLE POINT: 3.5 MI.E.OF WELCOME ISL.LIGHTHOUSE
 STATION TYPE: LAKE

STATION ID: 01-0000-007-01

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR

STORET CODE: 02
 001

LAT: 48 23 47.27 LONG: 089 05 09.06 U T M: 16 0345600.0 5362250.0 4 REGION: 06

*INTERIM TEST-NAME:		PBUT	PH	PP04FR	PPUT	RSP	RST	TCMF COLIFORM TOTAL MF CNT /100ML	TCMFBK COLIFORM TOTAL MF BCKGRD CNT /100ML	TURB FTU	ZNUT UNF.TOT. MG/L AS ZN
SAMPLE DATE YYMMDD	LEAD UNF.TOT. MG/L AS PB		PH	PO4 FIL.REAC MG/L AS P	PHOSPHOR UNF.TOT. MG/L AS P	RESIDUE PARTIC. MG/L	RESIDUE TOTAL MG/L				
1040	10058	0.008	7.70	0.002	0.004	1.00	80.00	4<	4	0.20	0.0090
10080	10080	0.003<	7.60	0.002	0.004	1.00	80.00	4<	36	0.35	0.0020
1120	10103	0.003<	7.70	0.001	0.005	4.00	75.00	52	60	0.35	0.0020
1033	10126	0.003	7.90	0.004	0.006	1.00	70.00	10AID	90AID	0.30	0.0010
0950	10150	0.003<	7.70	0.002	0.006	1.00	85.00	10<	10AID	0.35	0.0010
1045	10173		7.70	0.003	0.006	1.00	90.00	30AID	600	0.40	
	MAXIMUM	0.008	7.90	0.004	0.006	4.00	90.00	52	690	0.40	0.0090
	ARITH MEAN	0.005	7.72	0.002	0.005	1.50	80.00	31	133	0.32	0.0030
	GEOM MEAN		7.72	0.002	0.005	1.26	79.74		41	0.32	0.0020
	MINIMUM	0.003	7.60	0.001	0.004	1.00	70.00	10	4	0.20	0.0010
	STD DEV (GEOM *)		0.10	0.001	0.001	1.22	7.07		6*	0.07	0.0034
	# SAMP IN STATISTICS	2	6	6	6	6	6	3	6	6	5
	% SAMP (EXCLUDED)	60						50			

1983 WATER QUALITY DATA REGION 6

15

B.O.W./ SITE: LAKE SUPERIOR
 SAMPLE POINT: 2.5 KILOMETERS EAST OF MCKELLAR ISLAND
 STATION TYPE: LAKE

STATION ID: 01-0000-010-01

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR

STORET CODE: 02
 001

LAT: 48 22 22.77 LONG: 089 09 47.57 U T M: 16 0339800.0 5359800.0 4 REGION: 06

**INTERIM		TEST-NAME:	FWSADP	FGPROJ	ALKT	ASUT	BOD5	CDUT	CLIDUR	COLAP	COND25	COUT
					ALK	ARSENIC	5 DAY					
SAMPLE			SAMPLE	PROJECT	TOTAL	UNF.TOT.	TOT.DEM.	CADMIUM	CHLORIDE	COLOUR	CONDUCT.	COBALT
DATE		HOUR	DEPTH	SUB-PROJ	MG/L	MG/L	MG/L	UNF.TOT.	UNF.REAC	APPARENT	25C	UNF.TOT.
YYMMDD		LMT	M	CODE	AS CAC03	AS AS	AS O	MG/L	MG/L	HZU	UMHO/CM	MG/L
								AS CD	AS CL-		AT 25 C	AS CO
830516	1215		10059	0101	41.0		0.40	0.0005<	2.400	12.000	103.0	0.0020<
830613			10081	0101	42.0		0.60		2.200	15.000	101.0	
830705	1140		10104	0101	45.0	0.0010<	1.00	0.0005<	5.900	24.000	117.0	0.0020<
830815	1057		10127	0101	41.0	0.0010<	0.10	0.0005	2.200	7.000	101.0	0.0020<
830919	1100		10151	0101	42.0	0.0010<	0.60	0.0005<	2.200	8.000	102.0	0.0020<
831012	1205		10174	0101	41.0		0.10		1.700	4.000	100.0	
MAXIMUM			0.30		45.0		1.00	0.0005	5.900	24.000	117.0	
ARITH MEAN			0.30		42.0		0.47	0.0005	2.767	11.667	104.0	
GEOM MEAN					42.0		0.34		2.520	9.945	103.8	
MINIMUM			0.30		41.0		0.10	0.0005	1.700	4.000	100.0	
STD DEV (GEOM *)					1.5		0.34		1.553	7.174	6.4	
# SAMP IN STATISTICS			6		6		6	1	6	6	6	
% SAMP (EXCLUDED)								75				

**INTERIM		TEST-NAME:	CRUT	CUUT	DO	FCMF	FEUT	FVPH	FWTEMP	HARDT	MNUT	NIUT
						FECAL						
SAMPLE			CHROMIUM	COPPER	DISOLVED	COLIFORM	IRON			HARDNESS	MANGANESE	NICKEL
DATE		HOUR	UNF.TOT.	UNF.TOT.	OXYGEN	MF	UNF.TOT.		WATER	TOTAL	UNF.TOT.	UNF.TOT.
YYMMDD		LMT	MG/L	MG/L	MG/L	CNT	MG/L		TEMP	MG/L	MG/L	MG/L
			AS CR	AS CU	AS O	/100HL	AS FE	PH	DEG.C	AS CAC03	AS MN	AS NI
830516	1215		0.0050	0.0020	13.0	4<	0.1100	7.5	3.0	45.000	0.003	0.002 <
830613					12.8	4<		7.3	6.0	44.000		
830705	1140		0.0040	0.0040	9.6	50AID	0.3500	7.7	10.5	47.000	0.012	0.0020<
830815	1057		0.0020	0.0030	9.8	10<	0.0450	7.5	18.5	44.000	0.003	0.004
830919	1100		0.0030	0.0010	9.5	12	0.0250	7.3	12.5	45.000	0.002	0.002 <
831012	1205				10.4	4			9.5	45.000		
MAXIMUM			0.0050	0.0040	13.0	50	0.3500	7.7	18.5	47.000	0.012	0.004
ARITH MEAN			0.0035	0.0025	10.8	22	0.1325	7.5	10.0	45.000	0.005	0.004
GEOM MEAN			0.0033	0.0022	10.8		0.0811	7.5	8.6	44.989	0.004	
MINIMUM			0.0020	0.0010	9.5	4	0.0250	7.3	3.0	44.000	0.002	0.004
STD DEV (GEOM *)			0.0013	0.0013	1.6		0.1495	0.2	5.4	1.095	0.005	
# SAMP IN STATISTICS			4	4	6	3	4	5	6	6	4	1
% SAMP (EXCLUDED)						50						75

(C O N T D)

1983 WATER QUALITY DATA REGION 6

16

B.O.W./ SITE: LAKE SUPERIOR
 SAMPLE POINT: 2.5 KILOMETERS EAST OF MCKELLAR ISLAND
 STATION TYPE: LAKE

STATION ID: 01-0000-010-01

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR

STORET CODE: 02
 001

LAT: 48 22 22.77 LONG: 089 09 47.57 U T M: 16 0339800.0 5359800.0 4 REGION: 06

*INTERIM TEST-NAME:		PBUT	PH	PP04FR	PPUT	RSP	RST	TCMF COLIFORM TOTAL MF CNT /100ML	TCMFBK COLIFORM TOTAL MF BCKGRD CNT /100ML	TURB TURB'ITY FTU	ZNUT ZINC UNF.TOT. MG/L AS ZN	
SAMPLE DATE YYMMDD	HOUR LMT	SAMPLE NUMBER	LEAD UNF.TOT. MG/L AS PB	PH	P04 FIL.REAC MG/L AS P	PHOSPHOR UNF.TOT. MG/L AS P	RESIDUE PARTIC. MG/L	RESIDUE TOTAL MG/L				
830516	1215	10059	0.003<	7.60	0.002	0.012	1.00	80.00	224	20	0.65	0.0010<
830613		10081		7.50	0.001	0.006	1.00	65.00	120	40AID	0.70	
830705	1140	10104	0.003<	7.50	0.003	0.020	6.00	100.00	26000	20000	2.80	0.0030
830815	1057	10127	0.004	7.80	0.002	0.005	2.00	90.00	30AID	140	0.45	0.0020
830919	1100	10151	0.003<	7.70	0.001	0.007	1.00	80.00	50AID	400	0.65	0.0010<
831012	1205	10174		7.70	0.003	0.007	1.00	75.00	10<	20AID	0.65	
MAXIMUM		0.004	7.80	0.003	0.020	6.00	100.00	26000	20000	2.80	0.0030	
ARITH MEAN		0.004	7.63	0.002	0.009	2.00	81.67	5285	3437	0.98	0.0025	
GEOM MEAN			7.63	0.002	0.008	1.51	80.92		162	0.79		
MINIMUM		0.004	7.50	0.001	0.005	1.00	65.00	30	20	0.45	0.0020	
STD DEV (GEOM *)			0.12	0.001	0.006	2.00	12.11		14*	0.89		
# SAMP IN STATISTICS		1	6	6	6	6	6	5	6	6	2	
% SAMP (EXCLUDED)		75						16			50	

1983 WATER QUALITY DATA REGION 6

17

B.O.W./ SITE: LAKE SUPERIOR
 SAMPLE POINT: 2 KM EAST OF NORTHERN WOOD PRESERVES
 STATION TYPE: LAKE

STATION ID: 01-0000-011-01

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR

STORET CODE: 02
 001

LAT: 48 25 17.58 LONG: 089 09 52.55 U T M: 16 0339850.0 5365200.0 4 REGION: 06

*=INTERIM		TEST-NAME:	FWSADP	FGPROJ	ALKT	ASUT	BOD5	CDUT	CLIDUR	COLAP	COND25	COUT
SAMPLE DATE YYMMDD	HOUR LMT	SAMPLE NUMBER	SAMPLE DEPTH M	PROJECT SUB-PROJ CODE	ALK	ARSENIC	BOD	CADMIUM	CHLORIDE	COLOUR APPARENT HZU	CONDUCT. 25C UMHO/CM AT 25 C	COBALT UNF.TOT. MG/L AS CO
					TOTAL MG/L AS CAC03	UNF.TOT. MG/L AS AS	5 DAY TOT.DEM. MG/L AS O	UNF.TOT. MG/L AS CD	UNF.REAC MG/L AS CL-			
830516	1200	10060	0.30	0101	41.0		0.30	0.0005<	1.700	7.000	99.0	0.0020<
830613		10082	0.30	0101	41.0		1.30		5.000	55.000	117.0	
830705	1130	10105	0.30	0101	44.0	0.0010<	0.80	0.0005<	2.000	6.000	100.0	0.0020<
830815	1045	10128	0.30	0101	42.0	0.0010<	0.10	0.0005	2.500	10.000	103.0	0.0020<
830919	1300	10152	0.30	0101	44.0	0.0010<	0.70	0.0005<	2.000	8.000	102.0	0.0020<
831012	1130	10175	0.30	0101	41.0		0.10		1.900	4.000	102.0	
MAXIMUM			0.30		44.0		1.30	0.0005	5.000	55.000	117.0	
ARITH MEAN			0.30		42.2		0.55	0.0005	2.517	15.000	103.8	
GEOM MEAN					42.1		0.36		2.334	9.509	103.7	
MINIMUM			0.30		41.0		0.10	0.0005	1.700	4.000	99.0	
STD DEV (GEOM *)					1.5		0.47		1.245	19.698	6.6	
# SAMP IN STATISTICS			6		6		6	1	6	6	6	
% SAMP (EXCLUDED)								75				
*=INTERIM		TEST-NAME:	CRUT	CUUT	DO	FCMF FECAL COLIFORM	FEUT	FVPH	FVTEMP	HARDT	MNUT	NIUT
SAMPLE DATE YYMMDD	HOUR LMT	SAMPLE NUMBER	CHROMIUM	COPPER	DISOLVED	IRON	PH FIELD	WATER TEMP DEG.C	HARDNESS TOTAL MG/L AS CAC03	MANGANESE UNF.TOT. MG/L AS MN	NICKEL UNF.TOT. MG/L AS NI	
			UNF.TOT. MG/L AS CR	UNF.TOT. MG/L AS CU	OXYGEN MG/L AS O	MF CNT /100HL						UNF.TOT. MG/L AS FE
830516	1200	10060	0.0050	0.0020	13.0	4<	0.0570	7.5	2.0	43.000	0.001	0.002 <
830613		10082			10.2	28C		7.2	10.0	46.000		
830705	1130	10105	0.0040	0.0020	11.2	10<	0.0130	7.3	8.0	45.000	0.001	0.0020<
830815	1045	10128	0.0030	0.0020	9.0	10<	0.1900	7.7	19.0	44.000	0.003	0.004
830919	1300	10152	0.0020<	0.0020	9.4	8	0.0420	7.8	12.5	45.000	0.003	0.002
831012	1130	10175			10.8	16		9.5	49.000			
MAXIMUM			0.0050	0.0020	13.0	28	0.1900	7.8	19.0	49.000	0.003	0.004
ARITH MEAN			0.0040	0.0020	10.6	17	0.0755	7.5	10.2	45.333	0.002	0.003
GEOM MEAN				0.0020	10.5		0.0493	7.5	8.4	45.295	0.002	
MINIMUM			0.0030	0.0020	9.0	8	0.0130	7.2	2.0	43.000	0.001	0.002
STD DEV (GEOM *)				0.0000	1.4		0.0785	0.3	5.6	2.066	0.001	
# SAMP IN STATISTICS			3	4	6	3	4	5	6	6	4	2
% SAMP (EXCLUDED)			25			50						50

(CONTD)

B.O.W./ SITE: LAKE SUPERIOR
SAMPLE POINT: 2 KM EAST OF NORTHERN WOOD PRESERVES
STATION TYPE: LAKE

STATION ID: 01-0000-011-01

MAJOR BASIN: GREAT LAKES
MINOR BASIN: LAKE SUPERIOR

STORET CODE: 02
001

LAT: 48 25 17.58 LONG: 089 09 52.55 U T M: 16 0339850.0 5365200.0 4 REGION: 06

[illegible]

1983 WATER QUALITY DATA REGION 6

19

B.O.W./ SITE: WHITE RIVER
 SAMPLE POINT: AT HIGHWAY 17
 STATION TYPE: RIVER

STATION ID: 01-0057-001-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: WHITE RIVER

STORET CODE: 02
 001
 2190

LAT: 48 43 24.33 LONG: 085 37 41.19 U T M: 16 0600900.0 5397400.0 4 REGION: 06 DISTANCE: 77.246

*INTERIM		TEST-NAME:	FWSADP	FGPROJ	ALKT	ALUT	ASUT	CDUT	COND25	CRUT	CUUT	DO
SAMPLE			SAMPLE	PROJECT	ALK	ALUMINUM	ARSENIC	CADMIUM	CONDUCT.	CHROMIUM	COPPER	DISOLVED
DATE	HOUR		DEPTH	SUB-PROJ	TOTAL	UNF. TOT.	UNF. TOT.	UNF. TOT.	25C	UNF. TOT.	UNF. TOT.	OXYGEN
YYMMDD	LMT	SAMPLE	M	CODE	MG/L	MG/L	MG/L	MG/L	UMHO/CM	MG/L	MG/L	MG/L
		NUMBER			AS CAC03	AS AL	AS AS	AS CD	AT 25 C	AS CR	AS CU	AS O
830105	1115	10508	0.30	0101	57.0		0.0010<	0.0012	140.0	0.0020<	0.0010	11.4
830124	1800	10526	0.30	0101	62.0		0.0010<	0.0005<	140.0	0.0020<	0.0020	14.7
830224	1011	10544	0.30	0101	68.0		0.0010<	0.0005<	250.0	0.0020<	0.0030	12.3
830328	1930	10562	0.30	0101	66.0		0.0010<	0.0010	158.0	0.0020<	0.0030	10.6
830425	1735	10580	0.30	0101	50.0		0.0010<	0.0010	128.0	0.0020<	0.0030	11.0
830524	1530	10598	0.30	0101	43.0		0.0010<	0.0005<	104.0	0.0020<	0.0010	10.5
830627	1455	10616	0.30	0101	60.0		0.0010	0.0005<	128.0	0.0020<	0.0050	8.0
830725	1530	10634	0.30	0101	71.0		0.0010	0.0015	166.0	0.0070	0.0030	7.6
830822	1600	10652	0.30	0101	82.0	0.004	0.0010<	0.0005<	176.0	0.0020<		6.1
830926	1535	10670	0.30	0101	87.0		0.0010<	0.0005<	196.0	0.0030	0.0010	7.3
831024	1650	10688	0.30	0101	53.0		0.0010	0.0005<	124.0	0.0020<	0.0020	10.9
831121	1545	10706	0.30	0101	62.0		0.0010<	0.0005<	138.0	0.0030	0.0010	12.8
831219	1605	10724	0.30	0101	60.0		0.0010	0.0005	134.0	0.0040	0.0010	13.2
MAXIMUM			0.30		87.0	0.004	0.0010	0.0015	250.0	0.0070	0.0050	14.7
ARITH MEAN			0.30		63.2	0.004	0.0010	0.0010	152.5	0.0042	0.0022	10.5
GEOM MEAN					62.1				148.7		0.0019	10.2
MINIMUM			0.30		43.0	0.004	0.0010	0.0005	104.0	0.0030	0.0010	6.1
STD DEV (GEOM *)					12.1				38.1		0.0013	2.6
# SAMP IN STATISTICS		13			13	1	4	5	13	4	12	13
% SAMP (EXCLUDED)							69	61		69		
*INTERIM		TEST-NAME:	FWPH	FWSTRC	FWTEMP	HGUT	PBUT	PH	PP04FR	PPUT	RSF	RSP
SAMPLE						MERCURY	LEAD		P04	PHOSPHOR		
DATE			PH	STREAM	WATER	UNF. TOT.	UNF. TOT.		FIL. REAC	UNF. TOT.	RESIDUE	RESIDUE
YYMMDD		SAMPLE	FIELD	COND.	TEMP	UG/L	MG/L		MG/L	MG/L	FILTERED	PARTIC.
		NUMBER			DEG.C	AS HG	AS PB	PH	AS P	AS P	MG/L	MG/L
830105	1115	10508	7.2	4	1.0	0.050<	0.003 <	7.50	0.001<	0.010	87.00	3.00
830124	1800	10526	7.0	4	0.5	0.050<	0.003 <	7.30	0.001	0.007	109.00	1.00
830224	1011	10544	7.4	4	0.5	0.050<	0.003 <	7.40	0.001<	0.008	157.00	3.00
830328	1930	10562	7.2	4	1.0	0.050<	0.005	7.40	0.002	0.009	129.00	1.00
830425	1735	10580	7.2	4	1.0	0.050<	0.004	7.40	0.001<	0.007	93.00	2.00
830524	1530	10598	7.2	3	10.0	0.050<	0.003 <	7.40	0.001<	0.009	97.00	3.00
830627	1455	10616	7.8		18.0	0.050<	0.0030<	7.70	0.002	0.023	100.00	2.00
830725	1530	10634			23.5	0.050<	0.004	7.80		0.011	118.00	2.00
830822	1600	10652	8.0		22.0	0.050<	0.006	7.90	0.002	0.012	109.00	1.00
830926	1535	10670	8.2		14.0	0.050<	0.003	8.00	0.001	0.008	149.00	1.00
831024	1650	10688			5.0	0.050<	0.003 <	7.50	0.002	0.011	129.00	1.00
831121	1545	10706	7.2		3.0	0.050<	0.003 <	7.60	0.003	0.008	109.00	1.00
831219	1605	10724	7.2	4	0.0	0.050<	0.003 <	7.30	0.004	0.007	119.00	1.00

(CONT'D)

1983 WATER QUALITY DATA REGION 6

20

B.O.W./ SITE: WHITE RIVER
 SAMPLE POINT: AT HIGHWAY 17
 STATION TYPE: RIVER

STATION ID: 01-0057-001-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: WHITE RIVER

STORET CODE: 02
 001
 2190

LAT: 48 43 24.33 LONG: 085 37 41.19 U T M: 16 0600900.0 5397400.0 4 REGION: 06 DISTANCE: 77.246

*INTERIM TEST-NAME:		FWPH	FWSTRC	FWTEMP	HGUT MERCURY	PBUT LEAD	PH	PP04FR P04	PPUT PHOSPHOR	RSF	RSP	
SAMPLE DATE	HOUR	SAMPLE NUMBER	PH FIELD	STREAM COND.	WATER TEMP DEG.C	UNF.TOT. UG/L AS HG	UNF.TOT. MG/L AS PB	FIL.REAC MG/L AS P	UNF.TOT. MG/L AS P	RESIDUE FILTERED MG/L	RESIDUE PARTIC. MG/L	
		MAXIMUM	8.2		23.5		0.006	8.00	0.004	0.023	157.00	3.00
		ARITH MEAN	7.4		7.7		0.004	7.55	0.002	0.010	115.77	1.69
		GEOM MEAN	7.4					7.55		0.009	114.10	1.51
		MINIMUM	7.0		0.0		0.003	7.30	0.001	0.007	87.00	1.00
		STD DEV (GEOM *)	0.4					0.23		0.004	20.93	0.85
# SAMP	IN	STATISTICS	11		13	5	13	8	13	13	13	
% SAMP	(EXCLUDED)					61		33				

*=INTERIM TEST-NAME: ZNUT
 ZINC
 UNF.TOT.
 MG/L
 AS ZN

SAMPLE DATE	HOUR	SAMPLE NUMBER	UNF.TOT. MG/L AS ZN
830105	1115	10508	0.0070
830124	1800	10526	0.0040
830224	1011	10544	0.0080
830328	1930	10562	0.0070
830425	1735	10580	0.0030
830524	1530	10598	0.0040
830627	1455	10616	0.0020
830725	1530	10634	0.0020
830822	1600	10652	0.0020
830926	1535	10670	0.0010
831024	1650	10688	0.002
831121	1545	10706	0.002
831219	1605	10724	0.0030

MAXIMUM 0.0080
 ARITH MEAN 0.004
 GEOM MEAN 0.003
 MINIMUM 0.0010
 STD DEV (GEOM *) 0.002
 # SAMP IN STATISTICS 13
 % SAMP (EXCLUDED)

B.O.W./ SITE: PIC RIVER
SAMPLE POINT: AT HIGHWAY 17
STATION TYPE: RIVER FLOW GAUGE FED 02BB003

STATION ID: 01-0060-001-02

MAJOR BASIN: GREAT LAKES
MINOR BASIN: LAKE SUPERIOR
TERM STREAM: PIC RIVER

STORET CODE: 02
001
2280

LAT: 48 42 25.57 LONG: 086 17 01.32

U T M: 16 0552700.0 5394925.0 4

REGION: 06

DISTANCE: 14.806

*#INTERIM		TEST-NAME:	FWSADP	FGPROJ	ALKT	ASUT	CDUT	COLAP	COND25	CRUT	CUUT	DO
					ALK	ARSENIC	CADMIUM		CONDUCT.	CHROMIUM	COPPER	DISOLVED
SAMPLE			SAMPLE	PROJECT	TOTAL	UNF. TOT.	UNF. TOT.	COLOUR	25C	UNF. TOT.	UNF. TOT.	OXYGEN
DATE	HOUR	SAMPLE	DEPTH	SUB-PROJ	MG/L	MG/L	MG/L	APPARENT	UMHO/CM	MG/L	MG/L	MG/L
YYMMDD	LMT	NUMBER	M	CODE	AS	AS	AS	HZU	AT 25 C	AS	AS	AS
830105	1225	10506	0.30	0101	122.0	0.0010	0.0019		301.0	0.0020	0.0030	12.0
830124	1550	10521	0.30	0101	137.0	0.0010<	0.0005<		286.0	0.0020<	0.0030	
830223	1455	10539	0.30	0101	121.0	0.0010<	0.0010		250.0	0.0020	0.0020	13.0
830328	1800	10557	0.30	0101	117.0	0.0010<	0.0020		246.0	0.0020<	0.0070	10.2
830425	1550	10575	0.30	0101	106.0	0.0010<	0.0005<	51.000	236.0	0.0060	0.0040	12.0
830503	1500	40200	0.30	0103	69.0		0.0007		141.0		0.0120	
830504	1445	40203	0.30	0103	66.0		0.0005		140.0		0.0150	
830505	1000	40206	0.30	0103	62.0		0.0007		131.0		0.0120	
830507	1130	40209	0.30	0103	63.0		0.0005<		138.0		0.0080	
830509	1000	40212	0.30	0103	63.0		0.0005<		136.0		0.0060	
830510	1010	40215	0.30	0103	63.0		0.0005<		138.0		0.0050	
830511		48219	0.30	0103								
	1200	40217	0.30	0103	64.0		0.0005<		140.0		0.0070	
830513	1045	40220	0.30	0103	66.0		0.0006		141.0		0.0090	
830515	1345	40223	0.30	0103	64.0		0.0010		133.0		0.0080	
830517	1145	40226	0.30	0103	60.0		0.0009		132.0		0.0040	
830519	1015	40229	0.30	0103	63.0		0.0005<		139.0		0.0040	
830521	1045	40232	0.30	0103	72.0		0.0005<		159.0		0.0070	
830523	1250	40235	0.30	0103	71.0		0.0005<		160.0		0.0070	
830524	1835	10593	0.30	0101	72.0	0.0010	0.0005<	101.000	159.0	0.0170	0.0090	11.8
830525	1100	40238	0.30	0103	67.0		0.0005<		146.0		0.0060	
830527	1110	40241	0.30	0103	65.0		0.0005<		141.0		0.0050	
830529	1415	40244	0.30	0103	65.0		0.0005<		140.0		0.0040	
830531	1320	40247	0.30	0103	71.0		0.0005<		148.0		0.0050	
830603	0940	40250	0.30	0103	74.0		0.0005<		164.0		0.0040	
830605	1330	40253	0.30	0103	78.0		0.0005<		171.0		0.0040	
830607	1015	40256	0.30	0103	82.0		0.0005<		175.0		0.0030	
830609	1040	40259	0.30	0103	83.0		0.0005<		178.0		0.0030	
830619	1400	40262	0.30	0103	107.0		0.0005<		199.0		0.0020	
830627		10611	0.30	0101	103.0	0.0012	0.0005<	59.000	195.0	0.0020<	0.0040	7.6
830703	1200	40265	0.30	0103	117.0		0.0005		222.0		0.0040	

(C O N T D)

1983 WATER QUALITY DATA REGION 6

22

B.O.W./ SITE: PIC RIVER
 SAMPLE POINT: AT HIGHWAY 17
 STATION TYPE: RIVER FLOW GAUGE FED 02BB003

STATION ID: 01-0060-001-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: PIC RIVER

STORET CODE: 02
 001
 2280

LAT: 48 42 25.57 LONG: 086 17 01.32

U T M: 16 0552700.0 5394925.0 4

REGION: 06

DISTANCE: 14.806

*INTERIM TEST-NAME:		FWSADP	FGPROJ	ALKT	ASUT	CDUT	COLAP	COND25	CRUT	CUUT	DO
				ALK	ARSENIC	CADMIUM		CONDUCT.	CHROMIUM	COPPER	DISOLVED
SAMPLE		SAMPLE	SAMPLE	TOTAL	UNF.TOT.	UNF.TOT.	COLOUR	25C	UNF.TOT.	UNF.TOT.	OXYGEN
DATE	HOUR	NUMBER	DEPTH	MG/L	MG/L	MG/L	APPARENT	UMHO/CM	MG/L	MG/L	MG/L
YYMMDD	LMT		M	AS CAC03	AS AS	AS CD	HZU	AT 25 C	AS CR	AS CU	AS O
831017	1345	40289	0.30	70.0		0.0005<		144.0		0.0070	
831019	1030	40292	0.30	69.0		0.0005<		142.0		0.0050	
831023	1345	40295	0.30	74.0		0.0005<		162.0		0.0050	
831024	1520	10683	0.30	77.0	0.0010	0.0005<	103.000	166.0	0.0050	0.0040	12.2
831030	1330	40298	0.30	87.0		0.0005<		174.0		0.0040	
831121	1405	10701	0.30	100.0	0.0010<	0.0005<	84.000	224.0	0.0090	0.0030	12.6
831219	1245	10719	0.30	103.0	0.0011	0.0005<	66.000	210.0	0.0030	0.0030	13.3
		MAXIMUM	0.30	143.0	0.0012	0.0020	103.000	301.0	0.0170	0.0150	13.3
		ARITH MEAN	0.30	87.5	0.0011	0.0010	69.889	182.3	0.007	0.005	10.5
		GEOM MEAN		84.6			67.032	177.2		0.004	10.2
		MINIMUM	0.30	60.0	0.0010	0.0005	41.000	131.0	0.0020	0.0020	7.0
		STD DEV (GEOM *)		23.6			21.566	45.4		0.003	2.5
		# SAMP IN STATISTICS	48	47	6	13	9	47	9	47	12
		% SAMP (EXCLUDED)			50	72			30		
*INTERIM TEST-NAME:		FCMF	FSMF	FWFLOW	FWPH	FWSTRC	FWTEMP	HGUT	NN02FR	NN03FR	NNTKUR
		FECAL	FECAL					MERCURY	NO2-N	NO3-N	K'DAHL N
		COLIFORM	STREPCUS	STREAM				UNF.TOT.	FIL.REAC	FIL.REAC	TOTAL
		MF	MF	FLOW				UG/L	MG/L	MG/L	UNF.REAC
DATE	HOUR	SAMPLE	CNT	M3	PH	STREAM	WATER	TEMP	AS N	AS N	AS N
YYMMDD	LMT	NUMBER	/100ML	/S	FIELD	COND.	DEG.C	AS HG			
830105	1225	10506	4<	288	28.500	7.2	4	0.0	0.050<	0.004	0.170
830124	1550	10521	4<	4	20.200	7.4	4	1.0		0.005	0.800
830223	1455	10539	4<	4	15.000	7.6	4	0.0	0.050<	0.004	0.420
830328	1800	10557	4<	8	16.300	7.3	4	0.0	0.050<	0.003	1.100
830425	1550	10575	4	4<	39.500	7.5	4	0.0	0.050<	0.006	0.310
830503	1500	40200			378.000			0.050<			0.180
830504	1445	40203			379.000						
830505	1000	40206			370.000			0.050<		0.120	
830507	1130	40209			280.000						
830509	1000	40212			200.000			0.050<		0.100	
830510	1010	40215			168.000					0.090	
830511		48219			172.000						
	1200	40217			172.000			0.050<		0.080	
830513	1045	40220			219.000					0.080	
830515	1345	40223			263.000			0.050<		0.060	
830517	1145	40226			209.000					0.060	
830519	1015	40229			157.000			0.050<		0.040	
830521	1045	40232			140.000					0.030	

(CONTD)

1983 WATER QUALITY DATA REGION 6

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B.O.W./ SITE: PIC RIVER
 SAMPLE POINT: AT HIGHWAY 17
 STATION TYPE: RIVER FLOW GAUGE FED 02BB003

STATION ID: 01-0060-001-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: PIC RIVER

STORET CODE: 02
 001
 2280

LAT: 48 42 25.57 LONG: 086 17 01.32 U T M: 16 0552700.0 5394925.0 4 REGION: 06 DISTANCE: 14.806

*INTERIM TEST-NAME:		FCMF FECAL COLIFORM MF CNT /100ML	FSMF FECAL STREPCUS MF CNT /100ML	FWFLOW STREAM FLOW M3 /S	FWPH PH FIELD	FWSTRC STREAM COND.	FWTEMP WATER TEMP DEG.C	HGUT MERCURY UNF. TOT. UG/L AS HG	NN02FR NO2-N FIL. REAC MG/L AS N	NN03FR NO3-N FIL. REAC MG/L AS N	NNTKUR K'DAHL N TOTAL UNF. REAC MG/L AS N
SAMPLE DATE YYMMDD	HOURL LMT	SAMPLE NUMBER									
830523	1250	40235		145.000				0.050<		0.050	
830524	1835	10593	4	167.000	7.4	3	8.0	0.050<	0.014	0.060	0.650
830525	1100	40238		195.000						0.060	
830527	1110	40241		227.000				0.050<		0.060	
830529	1415	40244		177.000						0.030	
830531	1320	40247		145.000				0.050<		0.030	
830603	0940	40250		117.000						0.020	
830605	1330	40253		95.900				0.050<		0.020	
830607	1015	40256		87.000						0.020	
830609	1040	40259		80.900				0.050<		0.020	
830619	1400	40262		48.200						0.010	
830627		10611	4<	47.000	8.0		16.0	0.050<	0.004	0.010	0.380
830703	1200	40265		29.000				0.050<		0.010	
830717	1130	40268		53.100						0.010<	
830725	1430	10629	8	49.500	7.95		23.0	0.05 <	0.004	0.010	0.410
830801	1000	40271		32.200				0.050<		0.010<	
830814	1440	40274		16.400						0.010<	
830822	1420	10647	16C	10.300	8.1		22.0		0.003	0.010<	0.340
830828	1440	40277		8.520				0.050<		0.010	
830917	1510	40280		33.300						0.010<	
830927	1000	10665	4<	21.900	7.9		12.0	0.050<	0.003	0.010<	0.370
	1100	40283		21.900				0.050<		0.010<	
831010	1525	40286		107.000						0.010	
831017	1345	40289		425.000						0.060	
831019	1030	40292		262.000						0.040	
831023	1345	40295		109.000						0.040	
831024	1520	10683	4	95.400	6.9		4.0	0.050<	0.006	0.040	0.540
831030	1330	40298		68.800				0.050<		0.040	
831121	1405	10701	4<	81.000	7.6		1.0	0.050<	0.003	0.210	0.480
831219	1245	10719	4<	32.500	7.7	4	0.0	0.050<	0.003	0.110	0.420
MAXIMUM		16	288	425.000	8.1		23.0		0.014	0.310	1.100
ARITH MEAN		7	67	129.486	7.6		6.7		0.005	0.073	0.531
GEOM MEAN				83.061	7.6				0.004		0.495
MINIMUM		4	4	8.520	6.9		0.0		0.003	0.010	0.300
STD DEV (GEOM *)				110.012	0.3				0.003		0.227
# SAMP IN STATISTICS		5	9	48	13		13		13	38	13
% SAMP (EXCLUDED)		61	25							15	

(C O N T D)

1983 WATER QUALITY DATA REGION 6

DATE OF REPORT: 26 FEB 88 PAGE: 24

B.O.W./ SITE: PIC RIVER
 SAMPLE POINT: AT HIGHWAY 17
 STATION TYPE: RIVER FLOW GAUGE FED 02BB003

STATION ID: 01-0060-001-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: PIC RIVER

STORET CODE: 02
 001
 2280

LAT: 48 42 25.57 LONG: 086 17 01.32 U T M: 16 0552700.0 5394925.0 4 REGION: 06 DISTANCE: 14.806

*INTERIM TEST-NAME:		PBUT	PH	PP04FR	PPUT	P1ALDR	P1BHCA	P1BHCB	P1BHCG	P1CHLA	P1CHLG
		LEAD		PO4	PHOSPHOR		BHC	BHC	BHC	CHLRDANE	CHLRDANE
SAMPLE	DATE HOUR	UNF.TOT.		FIL.REAC	UNF.TOT.	ALDRIN	ALPHA	BETA	GAMMA	ALPHA	GAMMA
YYMMDD	LMT	MG/L	PH	MG/L	MG/L	NG/L	NG/L	NG/L	NG/L	NG/L	NG/L
		AS PB		AS P	AS P						
830105	1225	10506	0.003<	7.90	0.001						
830124	1550	10521	0.003	7.80	0.002						
830223	1455	10539	0.003<	7.70	0.002						
830328	1800	10557	0.007	7.60	0.001						
830425	1550	10575	0.003<	7.70	0.014						
830503	1500	40200	0.007	7.90	0.019						
830504	1445	40203	0.003<	7.90							
830505	1000	40206	0.010	7.90	0.026						
830507	1130	40209	0.003<	7.80							
830509	1000	40212	0.003<	7.90	0.014						
830510	1010	40215	0.003<	7.80	0.013						
830511		48219		7.80		1<W	1<W	1<W	1<W	2<W	2<W
	1200	40217	0.003<	7.80	0.015	1<W	1<W	1<W	1<W	2<W	2<W
830513	1045	40220	0.019	7.90	0.025						
830515	1345	40223	0.003<	7.90	0.040						
830517	1145	40226	0.004	7.90	0.015						
830519	1015	40229	0.005	7.90	0.011						
830521	1045	40232	0.007	7.70	0.012						
830523	1250	40235	0.011	7.80	0.016						
830524	1835	10593	0.003<	7.60	0.028						
830525	1100	40238	0.003<	7.80	0.021						
830527	1110	40241	0.003<	7.80	0.018						
830529	1415	40244	0.004	7.90	0.013						
830531	1320	40247	0.003<	7.90	0.017						
830603	0940	40250	0.003<	7.70	0.011						
830605	1330	40253	0.003<	7.80	0.008						
830607	1015	40256	0.003<	7.80	0.009						
830609	1040	40259	0.003<	7.70	0.006						
830619	1400	40262	0.003	8.00	0.008						
830627		10611	0.003<	7.90	0.008						
830703	1200	40265	0.003<	8.00	0.004						
830717	1130	40268	0.014	7.70	0.004						
830725	1430	10629	0.014	7.80	0.008						
830801	1000	40271	0.006	7.80	0.007						
830814	1440	40274	0.007	7.90	0.004						
830822	1420	10647	0.009	7.90	0.002						
830828	1440	40277	0.017	7.90	0.002						
830917	1510	40280	0.003<	7.90	0.005						
830927	1000	10665	0.003<	7.80	0.007						
	1100	40283	0.003<	7.90	0.005						
831010	1525	40286	0.003<	7.80	0.007						

(C O N T D)

1983 WATER QUALITY DATA REGION 6

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B.O.W./ SITE: PIC RIVER
 SAMPLE POINT: AT HIGHWAY 17
 STATION TYPE: RIVER FLOW GAUGE FED 02BB003

STATION ID: 01-0060-001-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: PIC RIVER

STORET CODE: 02
 001
 2280

LAT: 48 42 25.57 LONG: 086 17 01.32 U T M: 16 0552700.0 5394925.0 4 REGION: 06 DISTANCE: 14.806

*INTERIM TEST-NAME:		PBUT	PH	PP04FR	PPUT	PIALDR	PIBHCA	PIBHCB	PIBHCG	PICHLA	PICHLG
		LEAD		P04	PHOSPHOR						
		UNF.TOT.		FIL.REAC	UNF.TOT.		BHC	BHC	BHC	CHLRDANE	CHLRDANE
SAMPLE DATE	YMHDD LMT	SAMPLE NUMBER	MG/L AS PB	MG/L AS P	MG/L AS P	ALDRIN NG/L	ALPHA NG/L	BETA NG/L	GAMMA NG/L	ALPHA NG/L	GAMMA NG/L
831017	1345	40289	0.003<	7.70	0.029						
831019	1030	40292	0.003<	7.80	0.021						
831023	1345	40295	0.003	7.70	0.009						
831024	1520	10683	0.003<	7.70	0.010						
831030	1330	40298	0.010	7.70	0.004						
831121	1405	10701	0.003<	7.70	0.012						
831219	1245	10719	0.003<	7.60	0.004						

MAXIMUM	0.019	8.00	0.040	0.440	1	1	1	1	2	2
ARITH MEAN	0.008	7.81	0.011	0.119	1<A	1<A	1<A	1<A	2<A	2<A
GEOM MEAN		7.81	0.008	0.069	1<A	1<A	1<A	1<A	2<A	2<A
MINIMUM	0.003	7.60	0.001	0.010	1	1	1	1	2	2
STD DEV (GEOM *)		0.10	0.009	0.117	0<A	0<A	0<A	0<A	0<A	0<A
# SAMP IN STATISTICS	19	48	45	47	2	2	2	2	2	2
% SAMP (EXCLUDED)	59									

*INTERIM TEST-NAME:		PIDIEL	PIDMDT	PIENDR	PIENDS	PIEND1	PIEND2	PIHEPE	PIHEPT	PIMIRX	PIOCHL
			DMDT		ENDOSULP	ENDOSULP	ENDOSULP	HEPTA			
		DIELDRIN	MTHXYLLR	ENDRIN	SULPHATE	I	II	CHLOR	HEPACHOR	MIREX	OXCHLANE
SAMPLE DATE	YMHDD LMT	SAMPLE NUMBER	NG/L	NG/L	NG/L	NG/L	NG/L	EPOXIDE NG/L	NG/L	NG/L	NG/L
830511		48219	2<W	5<W	4<W	4<W	2<W	1<W	1<W	5<W	2<W
	1200	40217	2<W	5<W	4<W	4<W	2<W	1<W	1<W	5<W	2<W
MAXIMUM		2	5	4	4	2	4	1	1	5	2
ARITH MEAN		2<A	5<A	4<A	4<A	2<A	4<A	1<A	1<A	5<A	2<A
GEOM MEAN		2<A	5<A	4<A	4<A	2<A	4<A	1<A	1<A	5<A	2<A
MINIMUM		2	5	4	4	2	4	1	1	5	2
STD DEV (GEOM *)		0<A	0<A	0<A	0<A	0<A	0<A	0<A	0<A	0<A	0<A
# SAMP IN STATISTICS		2	2	2	2	2	2	2	2	2	2
% SAMP (EXCLUDED)											

(CONTD)

1983 WATER QUALITY DATA REGION 6

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B.O.W./ SITE: PIC RIVER
 SAMPLE POINT: AT HIGHWAY 17
 STATION TYPE: RIVER FLOW GAUGE FED 02BB003

STATION ID: 01-0060-001-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: PIC RIVER

STORET CODE: 02
 001
 2280

LAT: 48 42 25.57 LONG: 086 17 01.32 U T M: 16 0552700.0 5394925.0 4 REGION: 06 DISTANCE: 14.806

*=INTERIM	TEST-NAME:	P10PDT	P1PCBT	P1PPDD	P1PPDE	P1PPDT	P2AMET	P2ATRA	P2BLAD	P2PROM	P2PROP
SAMPLE	DATE HOUR	SAMPLE	PCB								
YYMMDD	LMT	NUMBER	NG/L	TOTAL	PP-DDD	PP-DDE	PP-DDT	AMETRYNE	ATRAZINE	BLADEX	PROMETON
			NG/L	NG/L	NG/L	NG/L	NG/L	NG/L	NG/L	NG/L	PRPAZINE
				NG/L							NG/L
830105	1225	10506		20<W							
830124	1550	10521		20<W							
830223	1455	10539		20<W							
830328	1800	10557		20<W							
830425	1550	10575		20<W							
830511		48219	5<W	20<W	5<W	1<W	5<W	50<W	50<W	100<W	50<W
	1200	40217	5<W	20<W	5<W	1<W	5<W	50<W	50<W	100<W	50<W
830524	1835	10593		25							
830627		10611		20<W							
830725	1430	10629		20<W							
830822	1420	10647		20<W							
830927	1000	10665		20<W							
831024	1520	10683		20<W							
831121	1405	10701		20<W							
	MAXIMUM	5	25	5	1	5	50	50	100	50	50
	ARITH MEAN	5<A	20<A	5<A	1<A	5<A	50<A	50<A	100<A	50<A	50<A
	GEOM MEAN	5<A	20<A	5<A	1<A	5<A	50<A	50<A	100<A	50<A	50<A
	MINIMUM	5	20	5	1	5	50	50	100	50	50
	STD DEV (GEOM *)	0<A	1<A	0<A	0<A	0<A	0<A	0<A	0<A	0<A	0<A
	# SAMP IN STATISTICS	2	14	2	2	2	2	2	2	2	2
	% SAMP (EXCLUDED)										

*=INTERIM	TEST-NAME:	P2PROY	P2SENC	P2SIM	RSF	RSP	TCMF	TCMFBK	TURB	X2HCB	ZNUT
SAMPLE	DATE HOUR	SAMPLE	PRMTRYNE	SENCOR	SIMAZINE	RESIDUE	RESIDUE	COLIFORM	COLIFORM		
YYMMDD	LMT	NUMBER	NG/L	NG/L	NG/L	FILTERED	PARTIC.	TOTAL	TOTAL MF		ZINC
						MG/L	MG/L	MF	BCKGRD		UNF. TOT.
								CNT	CNT		MG/L
								/100ML	/100ML	TURB'ITY	AS ZN
										FTU	
830105	1225	10506				225.00	5.00	10<	810		0.0140
830124	1550	10521				183.00	7.00	20AID	250		0.0080
830223	1455	10539				173.00	7.00	4<	36		0.0040
830328	1800	10557				183.00	7.00	8	204		0.048
830425	1550	10575				180.00	40.00	28	140	42.00	0.006
830503	1500	40200					590.0				
830504	1445	40203					920.0				
830505	1000	40206					750.0				
830507	1130	40209					460.0				
830509	1000	40212					300.0				
830510	1010	40215					240.0				

(C O N T D)

1983 WATER QUALITY DATA REGION 6

27

B.O.W./ SITE: PIC RIVER
 SAMPLE POINT: AT HIGHWAY 17
 STATION TYPE: RIVER FLOW GAUGE FED 02BB003

STATION ID: 01-0060-001-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: PIC RIVER

STORET CODE: 02
 001
 2280

LAT: 48 42 25.57 LONG: 086 17 01.32 U T M: 16 0552700.0 5394925.0 4 REGION: 06 DISTANCE: 14.806

*INTERIM TEST-NAME:		P2PROY	P2SENC	P2SIM	RSF	RSP	TCMF COLIFORM TOTAL MF CNT /100ML	TCMFBK COLIFORM TOTAL MF BCKGRD CNT /100ML	TURB TURB'ITY FTU	X2HCB HCB NG/L	ZNUT ZINC UNF.TOT. MG/L AS ZN
SAMPLE DATE YYMMDD	HOURLMT	SAMPLE NUMBER	PRMTRYNE NG/L	SENCOR NG/L	SIMAZINE NG/L	RESIDUE FILTERED MG/L	RESIDUE PARTIC. MG/L				
830511		48219	50<W	100<W	50<W					1<W	
	1200	40217	50<W	100<W	50<W		260.0			1<W	
830513	1045	40220					480.0				
830515	1345	40223					580.0				
830517	1145	40226					270.0				
830519	1015	40229					220.0				
830521	1045	40232					190.0				
830523	1250	40235					330.0				
830524	1835	10593				160.00	400.00	96	576	160.00	0.0160
830525	1100	40238					360.0				
830527	1110	40241					430.0				
830529	1415	40244					230.0				
830531	1320	40247					200.0				
830603	0940	40250					150.0				
830605	1330	40253					130.0				
830607	1015	40256					100.0				
830609	1040	40259					80.0				
830619	1400	40262					65.0				
830627		10611				145.00	25.00	88C	2900	21.00	0.0020
830703	1200	40265					10.0				
830717	1130	40268					30.0				
830725	1430	10629				150.00	50.00	400AID	3600	31.00	0.004
830801	1000	40271					20.0				
830814	1440	40274					10.0				
830822	1420	10647				161.00	9.00	200AID	6800	4.60	0.0030
830828	1440	40277					9.0				
830917	1510	40280					15.0				
830927	1000	10665				191.00	9.00	160	480	5.10	0.0010
	1100	40283					8.0				
831010	1525	40286					20.0				
831017	1345	40289					420.0				
831019	1030	40292					250.0				
831023	1345	40295					85.0				
831024	1520	10683				120.00	95.00	230	2500	30.00	0.0050
831030	1330	40298					35.0				
831121	1405	10701				165.00	55.00	90AID	2500	38.00	0.005
831219	1245	10719				155.00	5.00	10<	220	3.60	0.0070

(C O N T D)

1983 WATER QUALITY DATA REGION 6

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B.O.W./ SITE: PIC RIVER
 SAMPLE POINT: AT HIGHWAY 17
 STATION TYPE: RIVER FLOW GAUGE FED 02BB003

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: PIC RIVER

STATION ID: 01-0060-001-02

STORET CODE: 02
 001
 2280

LAT: 48 42 25.57 LONG: 086 17 01.32

U T M: 16 0552700.0 5394925.0 4

REGION: 06

DISTANCE: 14.806

*INTERIM TEST-NAME:		P2PROY	P2SENC	P2SIM	RSF	RSP	TCMF COLIFORM TOTAL MF CNT /100ML	TCMFBK COLIFORM TOTAL MF BCKGRD CNT /100ML	TURB TURB'ITY FTU	X2HCB HCB NG/L	ZNUT ZINC UNF.TOT. MG/L AS ZN
SAMPLE DATE YYMMDD	HOUR LMT	SAMPLE NUMBER	PRMTRYNE NG/L	SENCOR NG/L	SIMAZINE NG/L	RESIDUE FILTERED MG/L	RESIDUE PARTIC. MG/L				
		MAXIMUM	50	100	50	225.00	920.0	400	6800	160.00	1 0.048
		ARITH MEAN	50<A	100<A	50<A	168.54	190.7	132	1617	37.26	1<A 0.009
		GEOM MEAN	50<A	100<A	50<A	166.75	74.1		671	19.57	1<A 0.006
		MINIMUM	50	100	50	120.00	5.00	8	36	3.60	1 0.0010
		STD DEV (GEOM *)	0<A	0<A	0<A	25.56	218.8		5*	48.32	0<A 0.012
		# SAMP IN STATISTICS	2	2	2	13	47	10	13	9	2 13
		% SAMP (EXCLUDED)						23			

1983 WATER QUALITY DATA REGION 6

29

B.O.W./ SITE: BLACK RIVER
 SAMPLE POINT: AT HIGHWAY 17
 STATION TYPE: RIVER FLOW GAUGE FED 02BB002

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: PIC RIVER

STATION ID: 01-0060-002-02

STORET CODE: 02
 001
 2280

LAT: 48 41 16.70 LONG: 086 12 46.73 U T M: 16 0557925.0 5392850.0 4 REGION: 06 DISTANCE: 12.874

*INTERIM TEST-NAME:		FWSADP	FGPROJ	ALKT	ASUT	CDUT	COLAP	COND25	CRUT	CUUT	DO
SAMPLE	DATE	DATE	DEPTH	PROJECT	ALK	ARSENIC	COLOUR	CONDUCT.	CHROMIUM	COPPER	DISSOLVED
YMMDD	HOUR	NUMBER	M	SUB-PROJ	TOTAL	UNF.TOT.	APPARENT	25C	UNF.TOT.	UNF.TOT.	OXYGEN
	LMT			CODE	MG/L	MG/L	HZU	UMHO/CM	MG/L	MG/L	MG/L
					AS CACO3	AS AS		AT 25 C	AS CR	AS CU	AS O
830105	1205	10507	0.30	0101	91.0	0.0010<		224.0	0.0020	0.0030	11.4
830124	1615	10522	0.30	0101	102.0	0.0010<		232.0	0.0020<	0.0040	13.6
830224	1435	10540	0.30	0101	107.0	0.0010<		228.0	0.0020<	0.0030	12.9
830328	1820	10558	0.30	0101	98.0	0.0010<		220.0	0.0020<	0.0060	8.6
830425	1610	10576	0.30	0101	67.0	0.0010<	68.000	165.0	0.0040	0.0030	13.0
830503	1530	40201	0.30	0103	51.0			122.0		0.0030	
830504	1515	40204	0.30	0103	49.0			126.0		0.0060	
830505	1030	40207	0.30	0103	48.0			131.0		0.0030	
830507	1215	40210	0.30	0103	49.0			150.0		0.0050	
830509	1045	40213	0.30	0103	50.0			144.0		0.0050	
830510	1040	40216	0.30	0103	51.0			147.0		0.0050	
830511		48220	0.30	0103							
	1625	40218	0.30	0103	51.0			146.0		0.0050	
830513	1115	40221	0.30	0103	52.0			143.0		0.0030	
830515	1425	40224	0.30	0103	50.0			132.0		0.0020	
830517	1115	40227	0.30	0103	50.0			133.0		0.0060	
830519	1045	40230	0.30	0103	52.0			137.0		0.0030	
830521	1115	40233	0.30	0103	57.0			143.0		0.0040	
830523	1320	40236	0.30	0103	59.0			144.0		0.0020	
830524	1400	10594	0.30	0101	56.0	0.0010<	80.000	145.0	0.0020	0.0050	12.6
830525	1130	40239	0.30	0103	59.0			141.0		0.0040	
830527	1140	40242	0.30	0103	57.0			136.0		0.0040	
830529	1445	40245	0.30	0103	57.0			137.0		0.0070	
830531	1350	40248	0.30	0103	60.0			144.0		0.0030	
830603	1010	40251	0.30	0103	62.0			156.0		0.0050	
830605	1400	40254	0.30	0103	64.0			161.0		0.0030	
830607	1045	40257	0.30	0103	66.0			163.0		0.0030	
830609	1110	40260	0.30	0103	68.0			167.0		0.0030	
830619	1425	40263	0.30	0103	84.0			190.0		0.0020	
830627	1335	10612	0.30	0101	98.0	0.0010	58.000	217.0	0.0020<	0.0030	6.9
830703	1230	40266	0.30	0103	106.0			229.0		0.0030	
830717	1230	40269	0.30	0103	89.0			206.0		0.0030	
830725	1450	10630	0.30	0101	100.0	0.0010	48.000	234.0	0.002 <	0.004	6.0
830801	1030	40272	0.30	0103	110.0			251.0		0.0050	
830814	1500	40275	0.30	0103	127.0			265.0		0.0040	
830822	1435	10648	0.30	0101	134.0			274.0	0.0070	0.0040	5.9
830828	1510	40278	0.30	0103	140.0			270.0		0.0020	
830917	1550	40281	0.30	0103	138.0			274.0		0.0020	
830927	1315	40284	0.30	0103	125.0			257.0		0.0020	
831010	1525	40287	0.30	0103	75.0			214.0		0.0040	
831017	1415	40290	0.30	0103	58.0			171.0		0.0060	

(CONT'D)

1983 WATER QUALITY DATA REGION 6

30

B.O.W./ SITE: BLACK RIVER
 SAMPLE POINT: AT HIGHWAY 17
 STATION TYPE: RIVER FLOW GAUGE FED 02BB002

STATION ID: 01-0060-002-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: PIC RIVER

STORET CODE: 02
 001
 2280

LAT: 48 41 16.70 LONG: 086 12 46.73 U T M: 16 0557925.0 5392850.0 4 REGION: 06 DISTANCE: 12.874

*=INTERIM TEST-NAME:		FWSADP	FGPROJ	ALKT	ASUT	CDUT	COLAP	COND25	CRUT	CUUT	DO
SAMPLE		SAMPLE	PROJECT	ALK	ARSENIC	CADMIUM	COLOUR	CONDUCT.	CHROMIUM	COPPER	DISOLVED
DATE	HR	DEPTH	SUB-PROJ	TOTAL	UNF.TOT.	UNF.TOT.	COLOUR	25C	UNF.TOT.	UNF.TOT.	OXYGEN
YYMMDD	LMT	M	CODE	MG/L	MG/L	MG/L	APPARENT	UMHO/CM	MG/L	MG/L	MG/L
				AS CAC03	AS AS	AS CD	HZU	AT 25 C	AS CR	AS CU	AS O
831019	1000	40293	0103	59.0		0.0005<		182.0		0.0050	
831023	1415	40296	0103	61.0		0.0005<		178.0		0.0060	
831024	1530	10684	0101	62.0	0.0010<	0.0005<	100.000	184.0	0.0030	0.0050	11.6
831030	1400	40299	0103	68.0				182.0			
831121	1420	10702	0101	77.0	0.0010<	0.0005<	83.000	181.0	0.0060	0.0030	12.6
831219	1515	10720	0101	89.0	0.0011	0.0005<	74.000	209.0	0.0040	0.0040	13.4
MAXIMUM		0.30		140.0	0.0011	0.0020	100.000	274.0	0.0070	0.0070	13.6
ARITH MEAN		0.30		75.7	0.0010	0.0009	67.625	182.3	0.0040	0.004	10.7
GEOM MEAN				71.6			63.931	177.0		0.004	10.3
MINIMUM		0.30		48.0	0.0010	0.0005	30.000	122.0	0.0020	0.0020	5.9
STD DEV (GEOM %)				27.3			21.948	45.9		0.001	3.0
# SAMP IN STATISTICS		47		46	3	12	8	46	7	45	12
% SAMP (EXCLUDED)					72	73			41		

*=INTERIM TEST-NAME:		FCHF	FSMF	FHFLOW	FHPH	FHSTRC	FHTEMP	HGUT	NNO2FR	NNO3FR	NNTKUR	
SAMPLE		FECAL	FECAL	STREAM				MERCURY	N02-N	N03-N	K'DAHL N	
DATE	HR	COLIFORM	STREPCUS	FLOW	PH	STREAM	WATER	UNF.TOT.	FIL.REAC	FIL.REAC	UNF.REAC	
YYMMDD	LMT	MF	MF	M3	FIELD	COND.	TEMP	UG/L	MG/L	MG/L	MG/L	
		/100ML	/100ML	/S			DEG.C	AS HG	AS N	AS N	AS N	
830105	1205	10507	4<	12	14.916	7.4	4	1.0	0.050<	0.004	0.140	0.600
830124	1615	10522	4<	4<	10.679	7.2	4	0.5	0.050<	0.004	0.180	0.480
830224	1435	10540	4	12	8.565	7.4	4	1.0	0.050<	0.003	0.170	0.330
830328	1820	10558	4	8	10.622	7.2	4	1.0	0.050<	0.004	0.230	0.370
830425	1610	10576	4<	4<	33.335	7.35		1.0	0.050<	0.004	0.340	0.340
830503	1530	40201			174.020				0.050<		0.210	
830504	1515	40204			179.670							
830505	1030	40207			177.410				0.050<		0.180	
830507	1215	40210			157.070							
830509	1045	40213			129.950				0.050<		0.160	
830510	1040	40216			117.520				0.050<		0.150	
830511		48220			110.401							
	1625	40218			110.401				0.050<		0.140	
830513	1115	40221			115.260						0.140	
830515	1425	40224			124.300				0.050<		0.120	
830517	1115	40227			111.192						0.110	
830519	1045	40230			92.321				0.050<		0.110	
830521	1115	40233			80.795						0.110	
830523	1320	40236			77.744				0.050<		0.120	

(C O N T D)

1983 WATER QUALITY DATA REGION 6

31

B.O.W./ SITE: BLACK RIVER
 SAMPLE POINT: AT HIGHWAY 17
 STATION TYPE: RIVER FLOW GAUGE FED 02BB002

STATION ID: 01-0060-002-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: PIC RIVER

STORET CODE: 02
 001
 2280

LAT: 48 41 16.70 LONG: 086 12 46.73 U T M: 16 0557925.0 5392850.0 4 REGION: 06 DISTANCE: 12.874

*INTERIM		TEST-NAME:	FCMF FECAL COLIFORM HF CNT /100ML	FSMF FECAL STREPCUS MF CNT /100ML	FWFLOW STREAM FLOW M3 /S	FWPH PH FIELD	FWSTRC STREAM COND.	FWTEMP WATER TEMP DEG.C	HGUT MERCURY UNF.TOT. UG/L AS HG	NN02FR NO2-N FIL.REAC MG/L AS N	NN03FR NO3-N FIL.REAC MG/L AS N	NNTKUR K'DAHL N TOTAL UNF.REAC MG/L AS N
SAMPLE DATE YYMMDD	HR LMT	SAMPLE NUMBER										
830524	1400	10594	4<	4	86.558	7.4	3	9.0	0.050<	0.007	0.130	0.510
830525	1130	40239			92.434						0.120	
830527	1140	40242			95.485				0.050<		0.100	
830529	1445	40245			85.428						0.090	
830531	1350	40248			75.823				0.050<		0.100	
830503	1010	40251			64.975						0.110	
830605	1400	40254			56.048				0.050<		0.110	
830607	1045	40257			49.042						0.020	
830609	1110	40260			44.748				0.050<		0.110	
830619	1425	40263			26.329						0.150	
830627	1335	10612	8	4	15.820	8.1		17.0	0.050<	0.008	0.180	0.370
830703	1230	40266			12.882				0.050<		0.160	
830717	1230	40269			16.724						0.130	
830725	1450	10630	4<	60	10.837	8.1		23.5	0.05<	0.005	0.190	0.380
830801	1030	40272			7.413				0.050<		0.170	
830814	1500	40275			5.650						0.030	
830822	1435	10648	8	4<	5.198	8.1	9	23.0		0.001	0.010	0.320
830828	1510	40278			5.119				0.050<		0.010	
830917	1550	40281			7.639						0.050	
830927	1315	40284			6.825				0.050<		0.030	
831010	1525	40287			28.363						0.200	
831017	1415	40290			163.850						0.170	
831019	1000	40293			148.030						0.150	
831023	1415	40296			84.637						0.120	
831024	1530	10684	4<	12	75.032			4.5	0.050<	0.007	0.120	0.670
831030	1400	40299			45.765						0.120	
831121	1420	10702	8		33.900	7.4		2.0	0.050<	0.002	0.240	0.470
831219	1515	10720	20	4	15.707	7.4	4	0.0	0.050<	0.003	0.200	0.480
MAXIMUM			20	60	179.670	8.1		23.5		0.008	0.340	0.670
ARITH MEAN			9	14	68.137	7.5		7.0		0.004	0.135	0.443
GEOM MEAN					41.883	7.5				0.004	0.112	0.431
MINIMUM			4	4	5.119	7.2		0.0		0.001	0.010	0.320
STD DEV (GEOM *)					54.569	0.4				0.002	0.064	0.112
# SAMP IN STATISTICS			6	8	47	11		12		12	44	12
% SAMP (EXCLUDED)			50	27								

(C O N T D)

1983 WATER QUALITY DATA REGION 6

32

B.O.W./ SITE: BLACK RIVER
 SAMPLE POINT: AT HIGHWAY 17
 STATION TYPE: RIVER FLOW GAUGE FED 02BB002

STATION ID: 01-0060-002-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: PIC RIVER

STORET CODE: 02
 001
 2280

LAT: 48 41 16.70 LONG: 086 12 46.73 U T M: 16 0557925.0 5392850.0 4 REGION: 06 DISTANCE: 12.874

*=-INTERIM TEST-NAME:		PBUT	PH	PP04FR	PPUT	P1ALDR	P1BHCA	P1BHCB	P1BHCG	P1CHLA	P1CHLG
		LEAD		PO4	PHOSPHOR		BHC	BHC	BHC	CHLRDANE	CHLRDANE
SAMPLE		UNF.TOT.		FIL.REAC	UNF.TOT.	ALDRIN	ALPHA	BETA	GAMMA	A'PHA	GAHMA
DATE	HOUR	MG/L	PH	MG/L	MG/L	NG/L	NG/L	NG/L	NG/L	NG/L	NG/L
YYMMDD	LMT	AS PB		AS P	AS P						
830105	1205	10507	0.003	7.70	0.001						
830124	1615	10522	0.003<	7.70	0.001						
830224	1435	10540	0.003	7.70	0.001<						
830328	1820	10558	0.003<	7.60	0.001<						
830425	1610	10576	0.003<	7.60	0.003						
830503	1530	40201	0.006	7.80	0.004						
830504	1515	40204	0.003	7.80							
830505	1030	40207	0.003<	7.80	0.004						
830507	1215	40210	0.003<	7.70							
830509	1045	40213	0.003<	7.70	0.004						
830510	1040	40216	0.003<	7.70	0.003						
830511		48220		7.70		1<W	1<W	1<W	1<W	2<W	2<W
	1625	40218	0.004	7.70	0.003	1<W	1<W	1<W	1<W	2<W	2<W
830513	1115	40221	0.003<	7.80	0.005						
830515	1425	40224	0.003	7.80	0.005						
830517	1115	40227	0.004	7.70	0.003						
830519	1045	40230	0.008	7.80	0.003						
830521	1115	40233	0.006	7.70	0.002						
830523	1320	40236	0.004	7.80	0.002						
830524	1400	10594	0.003<	7.80	0.004						
830525	1130	40239	0.003<	7.80	0.004						
830527	1140	40242	0.003	7.80	0.002						
830529	1445	40245	0.005	7.70	0.002						
830531	1350	40248	0.004	7.80	0.003						
830603	1010	40251	0.003<	7.40	0.003						
830605	1400	40254	0.003<	7.80	0.001						
830607	1045	40257	0.003<	7.80	0.002						
830609	1110	40260	0.003<	7.80	0.002						
830619	1425	40263	0.003<	7.90	0.002						
830627	1335	10612	0.003<	7.90	0.001						
830703	1230	40266	0.003<	8.00	0.002						
830717	1230	40269		7.80	0.003						
830725	1450	10630	0.003<	7.90	0.003						
830801	1030	40272	0.009	7.90	0.004						
830814	1500	40275	0.009	8.00	0.001						
830822	1435	10648	0.009	8.00	0.001						
830828	1510	40278	0.007	7.90	0.002						
830917	1550	40281	0.003<	8.10	0.002						
830927	1315	40284	0.003<	8.00	0.002						
831010	1525	40287	0.003<	7.80	0.003						
831017	1415	40290	0.003<	7.60	0.005						

(CONTD)

1983 WATER QUALITY DATA REGION 6

33

B.O.W./ SITE: BLACK RIVER
 SAMPLE POINT: AT HIGHWAY 17
 STATION TYPE: RIVER FLOW GAUGE FED 02BB002

STATION ID: 01-0060-002-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: PIC RIVER

STORET CODE: 02
 001
 2280

LAT: 48 41 16.70 LONG: 086 12 46.73 U T M: 16 0557925.0 5392850.0 4 REGION: 06 DISTANCE: 12.874

*INTERIM TEST-NAME:		PBUT	PH	PP04FR	PPUT	P1ALDR	P1BHCA	P1BHCB	P1BHCG	P1CHLA	P1CHLG
		LEAD		P04	PHOSPHOR		BHC	BHC	BHC	CHLRDANE	CHLRDANE
SAMPLE		UNF.TOT.		FIL.REAC	UNF.TOT.	ALDRIN	ALPHA	BETA	GAMMA	ALPHA	GAMMA
DATE	HOUR	MG/L	PH	MG/L	MG/L	NG/L	NG/L	NG/L	NG/L	NG/L	NG/L
YYMMDD	LMT	AS PB		AS P	AS P						
831019	1000	40293	0.003<	7.70	0.004	0.078					
831023	1415	40296	0.003	7.50	0.003	0.036					
831024	1530	10684	0.003<	7.60	0.004	0.034					
831030	1400	40299		7.60	0.002	0.020					
831121	1420	10702	0.003<	7.60	0.004	0.021					
831219	1515	10720	0.003<	7.50	0.003	0.008					
MAXIMUM		0.009	8.10	0.005	0.170	1	1	1	1	2	2
ARITH MEAN		0.005	7.76	0.003	0.043	1<A	1<A	1<A	1<A	2<A	2<A
GEOM MEAN			7.76		0.028	1<A	1<A	1<A	1<A	2<A	2<A
MINIMUM		0.003	7.40	0.001	0.005	1	1	1	1	2	2
STD DEV (GEOM *)			0.14		0.040	0<A	0<A	0<A	0<A	0<A	0<A
# SAMP IN STATISTICS		18	47	42	46	2	2	2	2	2	2
% SAMP (EXCLUDED)		59		4							

*INTERIM TEST-NAME:		P1DIEL	P1DMDT	PIENDR	PIENDS	PIEND1	PIEND2	P1HEPE	PIHEPT	P1MIRX	P1OCHL
			DMDT		ENDOSULP	ENDOSULP	ENDOSULP	HEPTA			
SAMPLE		DIELDRIN	MTHXYLLR	ENDRIN	SULPHATE	I	II	CHLOR	HEPACHOR	MIREX	OXCHLANE
DATE	HOUR	NG/L	NG/L	NG/L	NG/L	NG/L	NG/L	EPOXIDE	NG/L	NG/L	NG/L
YYMMDD	LMT										
830511		48220	2<W	5<W	4<W	4<W	2<W	4<W	1<W	1<W	5<W
	1625	40218	2<W	5<W	4<W	4<W	2<W	4<W	1<W	1<W	5<W
MAXIMUM		2	5	4	4	2	4	1	1	5	2
ARITH MEAN		2<A	5<A	4<A	4<A	2<A	4<A	1<A	1<A	5<A	2<A
GEOM MEAN		2<A	5<A	4<A	4<A	2<A	4<A	1<A	1<A	5<A	2<A
MINIMUM		2	5	4	4	2	4	1	1	5	2
STD DEV (GEOM *)		0<A	0<A	0<A	0<A	0<A	0<A	0<A	0<A	0<A	0<A
# SAMP IN STATISTICS		2	2	2	2	2	2	2	2	2	2
% SAMP (EXCLUDED)											

(C O N T D)

1983 WATER QUALITY DATA REGION 6

34

B.O.W./ SITE: BLACK RIVER
 SAMPLE POINT: AT HIGHWAY 17
 STATION TYPE: RIVER FLOW GAUGE FED 02BB002

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: PIC RIVER

STATION ID: 01-0060-002-02

STORET CODE: 02
 001
 2280

LAT: 48 41 16.70 LONG: 086 12 46.73 U T M: 16 0557925.0 5392850.0 4 REGION: 06 DISTANCE: 12.874

*=INTERIM TEST-NAME:		P10PDT	P1PCBT	P1PPDD	P1PPDE	P1PPDT	P2AMET	P2ATRA	P2BLAD	P2PROM	P2PROB	
SAMPLE DATE	HOUR	SAMPLE NUMBER	OP-DDT NG/L	PCB TOTAL NG/L	PP-DDD NG/L	PP-DDE NG/L	PP-DDT NG/L	AMETRYNE NG/L	ATRAZINE NG/L	BLADEX NG/L	PROMETON NG/L	PRPAZINE NG/L
830511		48220	5<W	20<W	5<W	1<W	5<W	50<W	50<W	100<W	50<W	50<W
	1625	40218	5<W	20<W	5<W	1<W	5<W	50<W	50<W	100<W	50<W	50<W
		MAXIMUM	5	20	5	1	5	50	50	100	50	50
		ARITH MEAN	5<A	20<A	5<A	1<A	5<A	50<A	50<A	100<A	50<A	50<A
		GEOM MEAN	5<A	20<A	5<A	1<A	5<A	50<A	50<A	100<A	50<A	50<A
		MINIMUM	5	20	5	1	5	50	50	100	50	50
		STD DEV (GEOM *)	0<A	0<A	0<A	0<A	0<A	0<A	0<A	0<A	0<A	0<A
		# SAMP IN STATISTICS	2	2	2	2	2	2	2	2	2	2
		% SAMP (EXCLUDED)										

*=INTERIM TEST-NAME:		P2PROY	P2SENC	P2SIM	RSF	RSP	TCMF COLIFORM TOTAL MF /100ML	TCMFBK COLIFORM TOTAL MF BCKGRD CNT /100ML	TURB	X2HCB	ZNUT
SAMPLE DATE	HOUR	SAMPLE NUMBER	PRNTRYNE NG/L	SENCOR NG/L	SIMAZINE NG/L	RESIDUE FILTERED MG/L	RESIDUE PARTIC. MG/L		TURB IDITY FTU	HCB NG/L	ZINC UNF. TOT. HG/L AS ZN
830105	1205	10507				165.00	5.00	10<	90AID		0.0350
830124	1615	10522				127.00	3.00	12	156		0.0340
830224	1435	10540				147.00	3.00	8	56		0.0260
830328	1820	10558				177.00	3.00	12	140		0.034
830425	1610	10576				115.00	15.00	28	152	5.40	0.016
830503	1530	40201					240.00				
830504	1515	40204					240.00				
830505	1030	40207					180.00				
830507	1215	40210					160.00				
830509	1045	40213					120.00				
830510	1040	40216					85.00				
830511		48220	50<W	100<W	50<W					1<W	
	1625	40218	50<W	100<W	50<W		80.0			1<W	
830513	1115	40221					110.00				
830515	1425	40224					120.00				
830517	1115	40227					75.00				
830519	1045	40230					60.00				
830521	1115	40233					50.00				
830523	1320	40236					50.00				
830524	1400	10594				160.00	80.00	30AID	510	22.00	0.0250
830525	1130	40239					75.00				
830527	1140	40242					65.00				
830529	1445	40245					55.00				

(C O N T D)

1983 WATER QUALITY DATA REGION 6

35

B.O.W./ SITE: BLACK RIVER
 SAMPLE POINT: AT HIGHWAY 17

STATION TYPE: RIVER FLOW GAUGE FED 028B002

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: PIC RIVER

STATION ID: 01-0060-002-02

STORET CODE: 02
 001
 2280

LAT: 48 41 16.70 LONG: 086 12 46.73

U T M: 16 0557925.0 5392850.0 4

REGION: 06

DISTANCE: 12.874

*INTERIM		TEST-NAME:	P2PROY	P2SENC	P2SIM	RSF	RSP	TCMF COLIFORM TOTAL MF CNT /100ML	TCMFBK COLIFORM TOTAL MF BCKGRD CNT /100ML	TURB	X2HCB	ZNUT
SAMPLE DATE YYMMDD	HOURL LMT	SAMPLE NUMBER	PRMTRYNE NG/L	SENCOR NG/L	SIMAZINE NG/L	RESIDUE FILTERED MG/L	RESIDUE PARTIC. MG/L			TURB'ITY FTU	HCB NG/L	ZINC UNF.TOT. MG/L AS ZN
830531	1350	40248					45.00					
830603	1010	40251					30.00					
830605	1400	40254					25.00					
830607	1045	40257					20.00					
830609	1110	40260					15.00					
830619	1425	40263					7.00					
830627	1335	10612				155.00	5.00	32	600	1.70		0.0100
830703	1230	40266					4.00					
830717	1230	40269					5.00					
830725	1450	10630				194.00	6.00	50C	4000	2.50		0.006
830801	1030	40272					4.00					
830814	1500	40275					2.00					
830822	1435	10648				178.00	2.00	90AID	2600	0.85		0.0030
830828	1510	40278					3.00					
830917	1550	40281					3.00					
830927	1315	40284					2.00					
831010	1525	40287					8.00					
831017	1415	40290					190.00					
831019	1000	40293					170.00					
831023	1415	40296					40.00					
831024	1530	10684				120.00	55.00	330	1300	7.40		0.0300
831030	1400	40299					10.00					
831121	1420	10702				145.00	15.00	70AID	2000	5.10		0.021
831219	1515	10720				176.00	4.00	140	1690	1.70		0.0300
MAXIMUM			50	100	50	194.00	240.00	330	4000	22.00	1	0.0350
ARITH MEAN			50<A	100<A	50<A	154.92	55.3	73	1108	5.83	1<A	0.022
GEOM MEAN			50<A	100<A	50<A	152.99	21.8		498	3.59	1<A	0.018
MINIMUM			50	100	50	115.00	2.00	8	56	0.85	1	0.0030
STD DEV (GEOM *)			0<A	0<A	0<A	25.00	65.9		4*	6.91	0<A	0.011
# SAMP IN STATISTICS			2	2	2	12	46	11	12	8	2	12
% SAMP (EXCLUDED)								8				

1983 WATER QUALITY DATA REGION 6

36

B.O.W./ SITE: BLACK RIVER
 SAMPLE POINT: AT HIGHWAY NO.614 SOUTH OF AGONZON
 STATION TYPE: RIVER

STATION ID: 01-0060-003-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: PIC RIVER

STORET CODE: 02
 001
 2280

LAT: 48 52 43.90 LONG: 085 52 48.98

U T M: 16 0582100.0 5414375.0 4

REGION: 06

DISTANCE: 84.327

*=INTERIM TEST-NAME:			FWSADP	FGPROJ	ACDT	ALKT	ASUT	BOD5	CDUT	CLIDUR	COLAP	COND25
					ACIDITY	ALK	ARSENIC	BOD	CADMIUM	CHLORIDE	COLOUR	CONDUCT.
			SAMPLE	PROJECT	TOTAL	TOTAL	UNF.TOT.	5 DAY	UNF.TOT.	UNF.REAC	COLOUR	25C
DATE	HR	SAMPLE	DEPTH	SUB-PROJ	MG/L	MG/L	MG/L	TOT.DEM.	MG/L	MG/L	APPARENT	UMHO/CM
YYMMDD	LMT	NUMBER	M	CODE	AS CAC03	AS CAC03	AS AS	AS 0	AS CD	AS CL-	HZU	AT 25 C
830105	1035	10509	0.30	0101	5.000	100.0		0.90	0.0011	1.500	73.000	232.0
830125	1120	10527	0.30	0101	5.000	109.0		1.00	0.0005<	1.000	67.000	244.0
830224	1100	10545	0.30	0101	4.000	116.0		0.60	0.0010	28.000	62.000	326.0
830329	1100	10563	0.30	0101	4.000	108.0		1.20	0.0020	0.900	67.000	245.0
830425	1820	10581	0.30	0101	3.000	85.0		0.30	0.0020	1.200	61.000	210.0
830524	1610	10599	0.30	0101	3.000	60.0		0.60	0.0005<	0.800	84.000	168.0
830627	1535	10617	0.30	0101	4.000	102.0	0.0010	0.70	0.0005<	1.100	57.000	239.0
830725	1620	10635	0.30	0101	4.000	109.0		1.10	0.0005	1.400	48.000	260.0
830822	1645	10653	0.30	0101	3.000	152.0		0.30	0.0005	1.700	33.000	297.0
830926	1615	10671	0.30	0101	3.000	133.0		0.90	0.0005<	0.800	42.000	268.0
831024	1800	10689	0.30	0101	2.000	65.0		0.80	0.0005<	1.500	106.000	215.0
831121	1630	10707	0.30	0101	3.000	96.0		0.60	0.0005<	1.300	77.000	230.0
831219	1655	10725	0.30	0101	5.000	100.0		0.90	0.0006	1.100	70.000	234.0
MAXIMUM			0.30		5.000	152.0	0.0010	1.20	0.0020	28.000	106.000	326.0
ARITH MEAN			0.30		3.692	102.7	0.0010	0.76	0.0011	3.254	65.154	243.7
GEOM MEAN					3.574	99.8		0.70		1.480	62.575	240.8
MINIMUM			0.30		2.000	60.0	0.0010	0.30	0.0005	0.800	33.000	168.0
STD DEV (GEOM *)					0.947	24.6		0.28		7.441	18.739	39.4
# SAMP IN STATISTICS			13		13	13	1	13	7	13	13	13
% SAMP (EXCLUDED)									46			

*=INTERIM TEST-NAME:			COUT	CRUT	CUUT	DO	FCMF	FEUT	FWPH	FWSTRC	FWTEMP	HARDT
			COBALT	CHROMIUM	COPPER	DISOLVED	FECAL	IRON				HARDNESS
			UNF.TOT.	UNF.TOT.	UNF.TOT.	OXYGEN	COLIFORM	UNF.TOT.			WATER	TOTAL
DATE	HR	SAMPLE	MG/L	MG/L	MG/L	MG/L	MF	MG/L	PH	STREAM	TEMP	MG/L
YYMMDD	LMT	NUMBER	AS CO	AS CR	AS CU	AS O	CNT	AS FE	FIELD	COND.	DEG.C	AS CAC03
830105	1035	10509	0.0020<	0.0020	0.0060	11.8	4<	0.3700	7.4	4	0.5	113.000
830125	1120	10527	0.0020<	0.0020<	0.0060	14.3	4<	0.3300	7.3	4	1.0	124.000
830224	1100	10545	0.0020<	0.0020<	0.0050	12.2	4	0.3600	7.35	4	1.0	127.000
830329	1100	10563	0.0020<	0.0030	0.0070	12.6	4<	0.4600	7.4	4	0.5	122.000
830425	1820	10581	0.0020<	0.0020<	0.0050	11.0	4<	0.3800	7.3	4	1.0	104.000
830524	1610	10599	0.0020<	0.0130	0.0040	11.5	4<	0.5200	7.1	3	8.0	82.000
830627	1535	10617	0.0020<	0.0020<	0.0040	9.5	8		8.1		16.0	124.000
830725	1620	10635	0.0020<	0.0090	0.0040	9.3	4	0.1700	8.1		23.0	138.000
830822	1645	10653	0.0020<	0.0030	0.0020	9.5	4<	0.1500	8.25		21.0	170.000
830926	1615	10671	0.0020<	0.0030	0.0020	10.3	4<		8.1		12.0	144.000
831024	1800	10689	0.0020<	0.0020<	0.0080	12.6	4	0.5100			4.5	106.000

(CONTD)

1983 WATER QUALITY DATA REGION 6

37

B.O.W./ SITE: BLACK RIVER
 SAMPLE POINT: AT HIGHWAY NO.614 SOUTH OF AGONZON
 STATION TYPE: RIVER

STATION ID: 01-0060-003-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: PIC RIVER

STORET CODE: 02
 001
 2280

LAT: 48 52 43.90 LONG: 085 52 48.98 U T M: 16 0582100.0 5414375.0 4 REGION: 06 DISTANCE: 84.327

*=INTERIM TEST-NAME:			COBT	CRUT	CUUT	DO	FCMF FECAL COLIFORM	FEUT	FWPH	FWSTRC	FWTEMP	HARDT
			COBALT UNF.TOT. MG/L AS CO	CHROMIUM UNF.TOT. MG/L AS CR	COPPER UNF.TOT. MG/L AS CU	DISOLVED OXYGEN MG/L AS O	HF CNT /100ML	IRON UNF.TOT. MG/L AS FE	PH FIELD	STREAM COND.	WATER TEMP DEG.C	HARDNESS TOTAL MG/L AS CAC03
831121	1630	10707	0.0020<	0.0030	0.0070	12.0	8	0.2700	7.3		1.0	117.000
831219	1655	10725	0.0020<	0.0030	0.0060	13.7	4<	0.2400	7.4	4	1.0	120.000
MAXIMUM				0.0130	0.0080	14.3	8	0.5200	8.25		23.0	170.000
ARITH MEAN				0.0049	0.0051	11.6	6	0.3418	7.6		7.0	122.385
GEOM MEAN					0.0047	11.5		0.3180	7.6		2.9	120.702
MINIMUM				0.0020	0.0020	9.3	4	0.1500	7.1		0.5	82.000
STD DEV (GEOM *)					0.0018	1.6		0.1259	0.4		8.3	21.144
# SAMP IN STATISTICS			8	13	13	5	11	12			13	13
% SAMP (EXCLUDED)			38			61						

*=INTERIM TEST-NAME:			HGUT	MNUT	NIUT	NNHTFR NH3-N TOTAL	NN02FR NO2-N	NN03FR NO3-N	NNTKUR K'DAHL N TOTAL	PBUT LEAD	PH	PP04FR P04 FIL.REAC MG/L AS P
			MERCURY UNF.TOT. UG/L AS HG	MANGANSE UNF.TOT. MG/L AS MN	NICKEL UNF.TOT. MG/L AS NI	FIL.REAC MG/L AS N	FIL.REAC MG/L AS N	FIL.REAC MG/L AS N	UNF.REAC MG/L AS N	UNF.TOT. MG/L AS PB	PH	
830105	1035	10509		0.024	0.002<	0.070	0.003	0.120	0.490	0.003<	7.60	0.001
830125	1120	10527		0.021	0.002<	0.050	0.003	0.130	0.550	0.003<	7.50	0.001
830224	1100	10545		0.023	0.002<	0.140	0.004	0.190	0.670	0.003<	7.70	0.001<
830329	1100	10563		0.029	0.007	0.050	0.006	0.240	0.620	0.004	7.60	0.003
830425	1820	10581		0.025	0.003	0.070	0.004	0.220	0.340	0.004	7.60	0.001<
830524	1610	10599		0.027	0.002<	0.250	0.007	0.120	0.610	0.003<	7.70	0.001
830627	1535	10617	0.050<		0.002	0.090	0.010	0.270	0.460	0.003<	8.00	0.002
830725	1620	10635		0.032	0.006	0.060	0.008	0.290	0.390	0.012	8.00	0.002
830822	1645	10653		0.037	0.006	0.020	0.001	0.020	0.310	0.009	8.10	0.001
830926	1615	10671			0.004	0.010	0.002	0.010<	0.340	0.003	8.00	0.002
831024	1800	10689		0.034	0.002<	0.320	0.007	0.130	0.810	0.003<	7.60	0.003
831121	1630	10707		0.025	0.002<	0.110	0.003	0.130	0.480	0.003<	7.70	0.003
831219	1655	10725		0.220	0.002<	0.120	0.004	0.150	0.500	0.003<	7.50	0.004
MAXIMUM				0.220	0.007	0.320	0.010	0.290	0.810	0.012	8.10	0.004
ARITH MEAN				0.045	0.005	0.105	0.005	0.167	0.505	0.006	7.74	0.002
GEOM MEAN				0.033		0.074	0.004		0.486		7.74	
MINIMUM				0.021	0.002	0.010	0.001	0.020	0.310	0.003	7.50	0.001
STD DEV (GEOM *)				0.058		0.089	0.003		0.146		0.21	
# SAMP IN STATISTICS			11	6	13	13	12	13	5	13	11	
% SAMP (EXCLUDED)				53			7		61		15	

(CONT'D)

1983 WATER QUALITY DATA REGION 6

38

B.O.W./ SITE: BLACK RIVER
 SAMPLE POINT: AT HIGHWAY NO.614 SOUTH OF AGONZON
 STATION TYPE: RIVER

STATION ID: 01-0060-003-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: PIC RIVER

STORET CODE: 02
 001
 2280

LAT: 48 52 43.90 LONG: 085 52 48.98

U T M: 16 0582100.0 5414375.0 4

REGION: 06

DISTANCE: 84.327

*INTERIM TEST-NAME:		PPUT	RSP	RST	SSO4UR	TCMF COLIFORM TOTAL	TCMFBK COLIFORM TOTAL MF	TURB	ZNUT	
SAMPLE DATE YYMMDD	HOUR LMT	SAMPLE NUMBER	PHOSPHOR UNF.TOT. MG/L AS P	RESIDUE PARTIC. MG/L	RESIDUE TOTAL MG/L	SULPHATE UNF.REAC MG/L AS SO4	HF CNT /100ML	BCKGRD CNT /100ML	TURB*ITY FTU	ZINC UNF.TOT. MG/L AS ZN
830105	1035	10509	0.011	2.00	170.00	9.900	20AID	90AID	1.10	0.0890
830125	1120	10527	0.010	2.00	140.00	12.000	16	64	0.80	0.0820
830224	1100	10545	0.007	5.00	190.00	11.000	4<	48	0.90	0.0780
830329	1100	10563	0.023	5.00	180.00	13.000	8	124	1.10	0.0890
830425	1820	10581	0.007	4.00	150.00	13.000	16	88	1.30	0.0650
830524	1610	10599	0.027	30.00	210.00	18.000	72	316	3.00	0.0540
830627	1535	10617	0.013	6.00	200.00	22.000	84C	1600	1.70	0.0120
830725	1620	10635	0.009	2.00	200.00	23.000	80AID	2000	1.20	0.0150
830822	1645	10653	0.007	1.00	240.00	12.000	70AID	2000	0.90	0.0050
830926	1615	10671	0.007	1.00	200.00	6.400	40AID	710	0.75	0.0040
831024	1800	10689	0.029	25.00	250.00	34.000	320	1600	4.10	0.091
831121	1630	10707	0.009	6.00	160.00	19.000	130	920	2.00	0.071
831219	1655	10725	0.007	3.00	190.00	18.000	10<	120	1.10	0.0810
MAXIMUM		0.029	30.00	250.00	34.000	320	2000	4.10	0.091	
ARITH MEAN		0.013	7.08	190.77	16.254	78	745	1.53	0.057	
GEOM MEAN		0.011	3.99	188.30	14.908		338	1.33	0.038	
MINIMUM		0.007	1.00	140.00	6.400	8	48	0.75	0.0040	
STD DEV (GEOM *)		0.008	9.29	32.01	7.243		4*	0.99	0.035	
# SAMP IN STATISTICS		13	13	13	13	11	13	13	13	
% SAMP (EXCLUDED)						15				

1983 WATER QUALITY DATA REGION 6

39

B.O.W./ SITE: BLACK RIVER
 SAMPLE POINT: 1 MI.BELOW OUTLET OF MOSE L.ONT.P&P RD.
 STATION TYPE: RIVER

STATION ID: 01-0060-004-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: PIC RIVER

STORET CODE: 02
 001
 2280

LAT: 49 08 08.40 LONG: 085 44 46.75 U T M: 16 0591450.0 5443075.0 4 REGION: 06 DISTANCE: 131.963

*=INTERIM TEST-NAME:		FWSADP	FGPROJ	ACDT	ALKT	ASUT	BOD5	CDUT	CLIDUR	COLAP	COND25
				ACIDITY	ALK	ARSENIC	BOD	CADMIUM	CHLORIDE	COLOUR	CONDUCT.
SAMPLE		SAMPLE	SAMPLE	PROJECT	TOTAL	UNF.TOT.	5 DAY	UNF.TOT.	UNF.REAC	APPARENT	25C
DATE	HR	NUMBER	DEPTH	SUB-PROJ	MG/L	MG/L	TOT.DEM.	MG/L	MG/L	HZU	UMHO/CM
YYMMDD	LMT		M	CODE	AS CAC03	AS CAC03	AS 0	AS CD	AS CL-		AT 25 C
830105	0920	10513	0.30	0101	7.000	75.0		1.20	0.0014	100.000	201.0
830125	0950	10531	0.30	0101	4.000	84.0	0.0010<	0.40	0.0005	88.000	206.0
830224	1241	10549	0.30	0101	11.000	95.0		1.00	0.0020	88.000	232.0
830329	0940	10567	0.30	0101	9.000	89.0		0.80	0.0030	99.000	257.0
830425	1940	10585	0.30	0101	11.000	77.0	0.0010<	0.40	0.0030	89.000	290.0
830524	1710	10603	0.30	0101	3.000	47.0		0.80	0.0005<	88.000	236.0
830627	1650	10621	0.30	0101	4.000	60.0		0.80	0.0005<	68.000	348.0
830725	1730	10639	0.30	0101	4.000	65.0	0.0010<	1.00	0.0015	59.000	382.0
830822	1800	10657	0.30	0101	5.000	60.0		0.80	0.0010	45.000	620.0
830926	1725	10675	0.30	0101	6.000	66.0		1.00	0.0005<	44.000	910.0
831024	1920	10693	0.30	0101	6.000	54.0	0.0010<	0.50	0.0011	111.000	207.0
831121	1805	10711	0.30	0101	6.000	72.0		0.70	0.0010	94.000	235.0
831219	1800	10729	0.30	0101	8.000	79.0		1.30	0.0008	100.000	221.0
MAXIMUM		0.30			11.000	95.0		1.30	0.0030	111.000	910.0
ARITH MEAN		0.30			6.462	71.0		0.82	0.0015	82.538	334.2
GEOM MEAN					5.985	69.7		0.77	2.483	79.390	296.4
MINIMUM		0.30			3.000	47.0		0.40	0.0005	44.000	201.0
STD DEV (GEOM *)					2.634	14.0		0.28	1.224	21.628	207.5
# SAMP IN STATISTICS		13			13	13		13	10	13	13
% SAMP (EXCLUDED)									23		

*=INTERIM		TEST-NAME:	COUT	CRUT	CUUT	DO	FCMF	FEUT	FWPH	FWSTRC	FWTEMP	HARDT
			COBALT	CHROMIUM	COPPER	DISOLVED	FECAL	IRON				HARDNESS
SAMPLE			UNF.TOT.	UNF.TOT.	UNF.TOT.	OXYGEN	COLIFORM	UNF.TOT.			WATER	TOTAL
DATE	HR	SAMPLE	MG/L	MG/L	MG/L	MG/L	MF	MG/L	PH	STREAM	TEMP	MG/L
YYMMDD	LHT	NUMBER	AS C7	AS CR	AS CU	AS O	/100ML	AS FE	FIELD	COND.	DEG.C	AS CAC03
830105	0920	10513	0.0020<	0.0020<	0.0110	12.2	4<	0.9500	7.1	4	0.0	97.000
830125	0950	10531	0.0020<	0.0020<	0.0060	11.7	4	0.8000	6.9		0.0	102.000
830224	1241	10549	0.0020<	0.0020	0.0080	8.8	4	0.8600	7.2	4	0.0	114.000
830329	0940	10567	0.0020<	0.0030	0.0120	9.0	4<	1.5000	7.0	4	0.0	124.000
830425	1940	10585	0.0020	0.0020<	0.0120	6.9	4<	1.2000	6.8		1.0	130.000
830524	1710	10603	0.0020<	0.0100	0.0070	10.3	12	0.5700	6.8	3	7.5	103.000
830627	1650	10621	0.0020<	0.0020<	0.0090	7.7	8		8.0		19.5	156.000
830725	1730	10639	0.0020<	0.0060	0.0100	6.6	4<	0.3000	7.7		25.0	178.000
830822	1800	10657	0.0020<	0.0080	0.0070	5.8	12	0.2300	7.6	0	22.5	289.000
830926	1725	10675	0.002	0.0030	0.0070	7.2	20		7.5	9	15.0	433.000
831024	1920	10693	0.0020<	0.0020	0.0240	8.4	12	0.4600			5.5	99.000

(C O N T D)

1983 WATER QUALITY DATA REGION 6

40

B.O.W./ SITE: BLACK RIVER
 SAMPLE POINT: 1 MI.BELOW OUTLET OF MOSE L.ONT.P&P RD.
 STATION TYPE: RIVER

STATION ID: 01-0060-004-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: PIC RIVER

STORET CODE: 02
 001
 2280

LAT: 49 08 08.40 LONG: 085 44 46.75

U T M: 16 0591450.0 5443075.0 4

REGION: 06

DISTANCE: 131.963

*=INTERIM		TEST-NAME:	COUT	CRUT	CUUT	DO	FCMF FECAL COLIFORM	FEUT	FVPH	FVSTRC	FVTEMP	HARDT
			COBALT UNF.TOT. MG/L AS CO	CHROMIUM UNF.TOT. MG/L AS CR	COPPER UNF.TOT. MG/L AS CU	DISOLVED OXYGEN MG/L AS O	MF CNT /100ML	IRON UNF.TOT. MG/L AS FE	PH FIELD	STREAM COND.	WATER TEMP DEG.C	HARDNESS TOTAL MG/L AS CAC03
SAMPLE DATE YYMMDD	HOUR LMT	SAMPLE NUMBER										
831121	1805	10711	0.0020<	0.0020	0.0110	11.4	4	0.3700	7.0	4	0.5	113.000
831219	1800	10729	0.0020<	0.0020<	0.0110	10.0	8	0.5100	7.2	4	0.0	112.000
MAXIMUM			0.002	0.0100	0.0240	12.2	20	1.5000	8.0		25.0	433.000
ARITH MEAN			0.002	0.0045	0.0104	8.9	9	0.7045	7.2		7.4	157.692
GEOM MEAN					0.0097	8.7		0.6056	7.2			140.290
MINIMUM			0.0020	0.0020	0.0060	5.8	4	0.2300	6.8		0.0	97.000
STD DEV (GEOM *)					0.0046	2.1		0.3985	0.4			97.711
# SAMP IN STATISTICS			2	8	13	13	9	11	12		13	13
% SAMP (EXCLUDED)			84	38			30					

*=INTERIM		TEST-NAME:	MNUT	NIUT	NNHTFR NH3-N TOTAL	NN02FR NO2-N FIL.REAC	NN03FR NO3-N FIL.REAC	NNTKUR K'DAHL N TOTAL	PBUT	PH	PP04FR PO4 FIL.REAC	PPUT PHOSPHOR UNF.TOT.
			MANGANESE UNF.TOT. MG/L AS MN	NICKEL UNF.TOT. MG/L AS NI	FIL.REAC MG/L AS N	FIL.REAC MG/L AS N	FIL.REAC MG/L AS N	UNF.REAC MG/L AS N	LEAD UNF.TOT. MG/L AS PB		AS P	AS P
SAMPLE DATE YYMMDD	HOUR LMT	SAMPLE NUMBER								PH		
830105	0920	10513	0.050	0.002<	0.170	0.005	0.100	0.710	0.003 <	7.20	0.001	0.013
830125	0950	10531	0.053	0.002<	0.150	0.005	0.100	0.870	0.003 <	7.20	0.001	0.012
830224	1241	10549	0.110	0.002<	0.260	0.005	0.150	0.880	0.003 <	7.10	0.001	0.024
830329	0940	10567	0.110	0.008	0.360	0.005	0.190	0.740	0.006	7.20	0.002	0.015
830425	1940	10585	0.130	0.002	1.000	0.006	0.240	1.400	0.003 <	7.00	0.001	0.012
830524	1710	10603	0.038	0.002<	1.100	0.009	0.120	1.600	0.003 <	7.40	0.001	0.015
830627	1650	10621		0.002	2.100	0.010	0.070	2.700	0.0030<	7.70	0.002	0.011
830725	1730	10639	0.033	0.009	2.100	0.012	0.320	2.400	0.017	7.70	0.002	0.009
830822	1800	10657	0.052	0.010	3.400	0.020	0.630	4.100	0.017	7.60	0.001	0.014
830926	1725	10675		0.004	8.200	0.014	0.570	8.600	0.003 <	7.60	0.002	0.017
831024	1920	10693	0.036	0.002	0.340	0.006	0.080	0.850	0.003 <	7.20	0.003	0.012
831121	1805	10711	0.035	0.002<	0.400	0.003	0.120	0.940	0.003 <	7.30	0.003	0.008
831219	1800	10729	0.048	0.002<	0.170	0.004	0.140	0.760	0.003 <	7.20	0.005	0.014
MAXIMUM			0.130	0.010	8.200	0.020	0.630	8.600	0.017	7.70	0.005	0.024
ARITH MEAN			0.063	0.005	1.519	0.008	0.218	2.042	0.013	7.34	0.002	0.014
GEOM MEAN			0.056		0.686	0.007	0.169	1.450		7.33	0.002	0.013
MINIMUM			0.033	0.002	0.150	0.003	0.070	0.710	0.006	7.00	0.001	0.008
STD DEV (GEOM *)			0.035		2.243	0.005	0.183	2.215		0.24	0.001	0.004
# SAMP IN STATISTICS			11	7	13	13	13	13	3	13	13	13
% SAMP (EXCLUDED)				46					76			

(C O N T D)

1983 WATER QUALITY DATA REGION 6

41

B.O.W./ SITE: BLACK RIVER
 SAMPLE POINT: 1 MI.BELOW OUTLET OF MOSE L.ONT.P&P RD.
 STATION TYPE: RIVER

STATION ID: 01-0060-004-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: PIC RIVER

STORET CODE: 02
 001
 2280

LAT: 49 08 08.40 LONG: 085 44 46.75

U T M: 16 0591450.0 5443075.0 4

REGION: 06

DISTANCE: 131.963

*INTERIM TEST-NAME:		RSP	RST	SS04UR	TCMF	TCMFBK	TURB	ZNUT
				SULPHATE	COLIFORM	COLIFORM		ZINC
SAMPLE	DATE	SAMPLE	RESIDUE	RESIDUE	UNF.REAC	TOTAL	TOTAL MF	UNF.TOT.
DATE	TIME	NUMBER	PARTIC.	TOTAL	MG/L	MF	BCKGRD	MG/L
YYMMDD	LMT		MG/L	MG/L	AS SO4	CNT	CNT	AS ZN
						/100ML	/100ML	
							TURB'ITY	
							FTU	
830105	0920	10513	1.00	140.00	19.000	30AID	110	0.2600
830125	0950	10531	1.00	160.00	16.000	20	140	0.1500
830224	1241	10549	2.00	160.00	18.000	16	108	0.1700
830329	0940	10567	6.00	190.00	33.000	16	100	0.3000
830425	1940	10585	6.00	220.00	58.000	32	324	0.3000
830524	1710	10603	6.00	180.00	57.000	76C	1200	0.1500
830627	1650	10621	3.00	260.00	110.000	200AID	5200	0.0920
830725	1730	10639	4.00	320.00	113.000	100AID	14100	0.0550
830822	1800	10657	4.00	500.00	246.000	400C	31000	0.0460
830926	1725	10675	6.00	720.00	374.000	200AID	3300	0.1200
831024	1920	10693	1.00	190.00	36.000	210	1000	0.330
831121	1805	10711	1.00	170.00	40.000	20AID	160	0.220
831219	1800	10729	1.00	180.00	27.000	60AID	110	0.2100
MAXIMUM			6.00	720.00	374.000	400	31000	0.330
ARITH MEAN			3.23	260.77	88.231	106	4381	0.185
GEOM MEAN			2.47	228.75	53.079	61	729	0.158
MINIMUM			1.00	140.00	16.000	16	100	0.0460
STD DEV (GEOM *)			2.20	168.20	106.586	3*	7*	0.094
# SAMP IN STATISTICS			13	13	13	13	13	13
% SAMP (EXCLUDED)								

1983 WATER QUALITY DATA REGION 6

42

B.O.W./ SITE: FOX CREEK
 SAMPLE POINT: AT HIGHWAY NO.614 MANITOUWADGE LAKE
 STATION TYPE: RIVER

STATION ID: 01-0060-005-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: PIC RIVER

STORET CODE: 02
 001
 2280

LAT: 49 07 58.93 LONG: 085 47 42.18

U T M: 16 0587900.0 5442725.0 4

REGION: 06

DISTANCE: 136.951

*=INTERIM TEST-NAME:		FWSADP	FGPROJ	ACDT	ALKT	BOD5	CDUT	CLIDUR	COLAP	COND25	COUT
				ACIDITY	ALK	5 DAY	CADMIUM	CHLORIDE	COLOUR	CONDUCT.	COBALT
SAMPLE	DATE	SAMPLE	SAMPLE	PROJECT	TOTAL	TOT.DEM.	UNF.TOT.	UNF.REAC	COLOUR	25C	UNF.TOT.
YYMMDD	HOUR	NUMBER	DEPTH	SUB-PROJ	MG/L	MG/L	MG/L	MG/L	APPARENT	UMHO/CM	MG/L
YYMMDD	LMT	NUMBER	M	CODE	AS CAC03	AS CAC03	AS O	AS CL-	HZU	AT 25 C	AS CO
830105	0855	10511	0.30	0101	11.000	69.0	0.60	0.0029	1.600	252.0	0.0020<
830125	0905	10529	0.30	0101	10.000	69.0	0.40	0.0014	1.800	254.0	0.0020<
830224	1208	10547	0.30	0101	8.000	71.0	0.20	0.0020	3.900	260.0	0.0020<
830329	0920	10565	0.30	0101	15.000	87.0	0.70	0.0040	2.500	295.0	0.0020
830425	1930	10583	0.30	0101	12.000	71.0	0.20	0.0060	4.000	297.0	0.0020
830524	1730	10601	0.30	0101	5.000	46.0	0.50	0.0005<	1.400	106.000	0.0020<
830627	1630	10619	0.30	0101	4.000	61.0	0.50	0.0005<	4.300	89.000	0.0020<
830725	1720	10637	0.30	0101	4.000	64.0	1.00	0.0015	4.600	88.000	0.0020<
830822	1750	10655	0.30	0101	3.000	70.0	0.60	0.0005	3.800	69.000	0.0020<
830926	1715	10673	0.30	0101	4.000	72.0	0.90	0.0005	5.100	66.000	0.0020<
831024	1910	10691	0.30	0101	5.000	51.0	0.50	0.0018	1.900	130.000	0.0020<
831121	1740	10709	0.30	0101	6.000	67.0	0.70	0.0020<	3.000	127.000	0.0020<
831219	1825	10727	0.30	0101	9.000	68.0	0.60	0.0012	2.600	127.000	0.0020<
		MAXIMUM	0.30		15.000	87.0	1.00	0.0060	5.100	130.000	0.0020
		ARITH MEAN	0.30		7.385	66.6	0.57	0.0022	3.115	103.555	0.0020
		GEOM MEAN			6.553	65.9	0.52		2.869	100.335	237.4
		MINIMUM	0.30		3.000	46.0	0.20	0.0005	1.400	66.000	168.0
		STD DEV (GEOM *)			3.754	10.1	0.23		1.242	26.368	36.9
		# SAMP IN STATISTICS	13		13	13	13	10	13	9	13
		% SAMP (EXCLUDED)						23			84

*=INTERIM TEST-NAME:		CRUT	CUUT	DO	FCMF	FEUT	FWPH	FWSTRC	FWTEMP	HARDT	MNUT
		CHROMIUM	COPPER	DISOLVED	FECAL	IRON				HARDNESS	MANGANESE
SAMPLE	DATE	UNF.TOT.	UNF.TOT.	OXYGEN	COLIFORM	UNF.TOT.			WATER	TOTAL	UNF.TOT.
YYMMDD	HOUR	MG/L	MG/L	MG/L	MF	MG/L			TEMP	MG/L	MG/L
YYMMDD	LMT	AS CR	AS CU	AS O	CNT	AS FE	PH	STREAM	DEG.C	AS CAC03	AS MN
					/100ML		FIELD	COND.			
830105	0855	10511	0.0020<	0.0250	9.3	4<	3.9000	7.0	0.0	118.000	0.130
830125	0905	10529	0.0020<	0.0220	11.6	8	3.3000	6.6	0.0	120.000	0.140
830224	1208	10547	0.0020<	0.0200	10.2	4<	1.4000	7.1	0.0	123.000	0.160
830329	0920	10565	0.0020	0.0270	10.8	72	4.6000	6.9	0.5	141.000	0.200
830425	1930	10583	0.0030	0.0580	9.0	4	3.5000	6.7	3	135.000	0.200
830524	1730	10601	0.0060	0.0130	10.0	4	1.0000	6.8	3	78.000	0.064
830627	1630	10619	0.0020<	0.0160	9.2	8		7.9	19.0	104.000	
830725	1720	10637	0.0060	0.0140	9.3	4<	0.8400	7.8	25.0	110.000	0.026
830822	1750	10655	0.0050	0.0120	5.9	4<	0.8600	7.9	21.0	119.000	0.037
830926	1715	10673	0.0020	0.0120	8.2	8		7.9	13.5	119.000	
831024	1910	10691	0.0020<	0.0350	9.4	12	0.6800		4.5	85.000	0.055

(CONT'D)

1983 WATER QUALITY DATA REGION 6

43

B.O.W./ SITE: FOX CREEK
 SAMPLE POINT: AT HIGHWAY NO.614 MANITOUWADGE LAKE
 STATION TYPE: RIVER

STATION ID: 01-0060-005-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: PIC RIVER

STORET CODE: 02
 001
 2280

LAT: 49 07 58.93 LONG: 085 47 42.18 U T M: 16 0587900.0 5442725.0 4 REGION: 06 DISTANCE: 136.951

*INTERIM TEST-NAME:		CRUT	CUUT	DO	FCMF FECAL COLIFORM	FEUT	FWPH	FWSTRC	FWTEMP	HARDT	MNUT
SAMPLE DATE	HOUR	CHROMIUM UNF.TOT. MG/L	COPPER UNF.TOT. MG/L	DISOLVED OXYGEN MG/L	IRON UNF.TOT. MG/L					HARDNESS TOTAL MG/L	MANGANESE UNF.TOT. MG/L
YYMMDD	LMT	AS CR	AS CU	AS O	CNT /100ML	AS FE	PH FIELD	STREAM COND.	WATER TEMP DEG.C	AS CACO3	AS MN
831121	1740	10709	0.0040	0.0170	11.8	16	1.3000	6.8	2.0	115.000	0.077
831219	1825	10727	0.0020	0.0150	11.2	224	1.7000	7.1	1.0	114.000	0.094
MAXIMUM		0.0060	0.0580	11.8	224	4.6000	7.9	25.0	141.000	0.200	
ARITH MEAN		0.0037	0.0220	9.7	40	2.0982	7.2	7.4	113.923	0.108	
GEOM MEAN			0.0196	9.6		1.6870	7.2		112.583	0.089	
MINIMUM		0.0020	0.0120	5.9	4	0.6800	6.6	0.0	78.000	0.026	
STD DEV (GEOM *)			0.0128	1.6		1.4329	0.5		17.337	0.062	
# SAMP IN STATISTICS		8	13	13	9	11	12	13	13	11	
% SAMP (EXCLUDED)		38			30						

*INTERIM TEST-NAME:		NIUT	NNHTFR NH3-N TOTAL	NNO2FR NO2-N FIL.REAC	NNO3FR NO3-N FIL.REAC	NNTKUR K'DAHL N TOTAL	PBUT	PH	PP04FR P04 FIL.REAC	PPUT PHOSPHOR UNF.TOT.	RSP RESIDUE PARTIC.
SAMPLE DATE	HOUR	NICKEL UNF.TOT. MG/L	FIL.REAC MG/L	FIL.REAC MG/L	FIL.REAC MG/L	UNF.REAC MG/L	UNF.TOT. MG/L				
YYMMDD	LMT	AS NI	AS N	AS N	AS N	AS N	AS PB	PH	AS P	AS P	MG/L
830105	0855	10511	0.002<	0.160	0.007	0.130	0.590	0.003 <	7.10	0.001	0.014
830125	0905	10529	0.002	0.150	0.008	0.150	0.700	0.003 <	7.00	0.002	0.012
830224	1208	10547	0.002	0.080	0.005	0.150	0.450	0.003 <	7.00	0.001	0.006
830329	0920	10565	0.009	0.170	0.007	0.240	0.610	0.005	6.90	0.002	0.015
830425	1930	10583	0.007	0.170	0.009	0.290	0.490	0.004	7.10	0.002	0.008
830524	1730	10601	0.002	0.040	0.006	0.090	0.380	0.003 <	7.30	0.001	0.010
830627	1630	10619	0.002<	0.020	0.005	0.100	0.350	0.0030<	7.70	0.002	0.004
830725	1720	10637	0.005	0.040	0.005	0.070	0.420	0.008	7.70	0.002	0.005
830822	1750	10655	0.004	0.010	0.003	0.020	0.410	0.009	7.90	0.002	0.013
830926	1715	10673	0.003	0.010	0.003	0.030	0.420	0.004	7.80	0.002	0.010
831024	1910	10691	0.002<	0.020	0.006	0.060	0.530	0.003 <	7.10	0.003	0.013
831121	1740	10709	0.002<	0.080	0.004	0.120	0.530	0.003 <	7.10	0.003	0.009
831219	1825	10727	0.002	0.120	0.005	0.150	0.540	0.003 <	7.20	0.003	0.014
MAXIMUM		0.009	0.170	0.009	0.290	0.700	0.009	7.90	0.003	0.015	4.00
ARITH MEAN		0.004	0.082	0.006	0.123	0.494	0.006	7.30	0.002	0.010	1.46
GEOM MEAN			0.054	0.005	0.099	0.484		7.29	0.002	0.010	1.31
MINIMUM		0.002	0.010	0.003	0.020	0.350	0.004	6.90	0.001	0.004	1.00
STD DEV (GEOM *)			0.064	0.002	0.077	0.101		0.35	0.001	0.004	0.88
# SAMP IN STATISTICS		9	13	13	13	13	5	13	13	13	13
% SAMP (EXCLUDED)		30					61				

(C O N T D)

1983 WATER QUALITY DATA REGION 6

44

B.O.W./ SITE: FOX CREEK
 SAMPLE POINT: AT HIGHWAY NO.614 MANITOUHADGE LAKE
 STATION TYPE: RIVER

STATION ID: 01-0060-005-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: PIC RIVER

STORET CODE: 02
 001
 2280

LAT: 49 07 58.93 LONG: 085 47 42.18

U T M: 16 0587900.0 5442725.0 4

REGION: 06

DISTANCE: 136.951

*INTERIM TEST-NAME:		RST	SS04UR	TCHF	TCHFBK	TURB	ZNUT	
			SULPHATE	COLIFORM	COLIFORM		ZINC	
SAMPLE		RESIDUE	UNF.REAC	TOTAL	TOTAL MF		UNF.TOT.	
DATE	HR	TOTAL	MG/L	MF	BCKGRD	TURB'ITY	MG/L	
YYMMDD	LMT	MG/L	AS SO4	CNT	CNT	FTU	AS ZN	
				/100ML	/100ML			
830105	0855	10511	180.00	48.000	30AID	50AID	2.20	0.5900
830125	0905	10529	170.00	48.000	28	324	2.20	0.6000
830224	1208	10547	190.00	46.000	4<	16	1.40	0.4900
830329	0920	10565	220.00	55.000	140	204	4.70	0.6600
830425	1930	10583	210.00	67.000	32	152	4.20	1.0000
830524	1730	10601	120.00	29.000	100	1000	1.70	0.3100
830627	1630	10619	170.00	42.000	64	856	1.40	0.2100
830725	1720	10637	210.00	40.000	10C	3700	1.40	0.1700
830822	1750	10655	180.00	41.000	110C	3000	1.80	0.1100
830926	1715	10673	210.00	41.000	200	500	1.80	0.1500
831024	1910	10691	190.00	28.000	430	800	1.40	0.490
831121	1740	10709	200.00	46.000	80AID	810	1.60	0.430
831219	1825	10727	190.00	43.000	370C	9000	1.90	0.4400
MAXIMUM		220.00	67.000	430	9000	4.70	1.0000	
ARITH MEAN		187.69	44.154	133	1570	2.13	0.435	
GEOM MEAN		185.78	43.101		524	1.96	0.364	
MINIMUM		120.00	28.000	10	16	1.40	0.1100	
STD DEV (GEOM *)		25.87	10.040		6*	1.07	0.250	
# SAMP IN STATISTICS		13	13	12	13	13	13	
% SAMP (EXCLUDED)				7				

1983 WATER QUALITY DATA REGION 6

45

B.O.W./ SITE: BLACK RIVER
 SAMPLE POINT: ABOVE HOSE LAKE ON ONT.P&P ROAD
 STATION TYPE: RIVER

STATION ID: 01-0060-006-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: PIC RIVER

STORET CODE: 02
 001
 2280

LAT: 49 08 30.01 LONG: 085 44 23.99 U T M: 16 0591900.0 5443750.0 4 REGION: 06 DISTANCE: 133.250

*INTERIM		TEST-NAME:	FWSADP	FGPROJ	ACDT	ALKT	ASUT	BOD5	CDUT	CLIDUR	COLAP	COND25
					ACIDITY	ALK	ARSENIC	BOD				
SAMPLE				PROJECT	TOTAL	TOTAL	UNF. TOT.	5 DAY	CADMIUM	CHLORIDE		CONDUCT.
DATE	HOUR		SAMPLE	SUB-PROJ	MG/L	MG/L	MG/L	TOT. DEM.	UNF. TOT.	UNF. REAC	COLOUR	25C
YMMDD	LMT	SAMPLE	DEPTH	CODE	AS CAC03	AS CAC03	AS AS	MG/L	MG/L	MG/L	APPARENT	UMHO/CM
		NUMBER	M					AS O	AS CD	AS CL-	HZU	AT 25 C
830105	0905	10512	0.30	0101	8.000	88.0		0.40	0.0005<	0.400	78.000	182.0
830125	0930	10530	0.30	0101	7.000	95.0	0.0010<	0.20	0.0005<	0.400	70.000	196.0
830224	1230	10548	0.30	0101	10.000	101.0		0.60	0.0005<	0.300	63.000	204.0
830329	0950	10566	0.30	0101	11.000	109.0		1.10	0.0020	0.400	72.000	228.0
830425	1950	10584	0.30	0101	5.000	77.0	0.0010<	0.30	0.0010	0.300	71.000	172.0
830524	1715	10602	0.30	0101	4.000	48.0		0.40	0.0005<	0.100	97.000	104.0
830627	1645	10620	0.30	0101	5.000	87.0		0.70	0.0005<	0.300	84.000	171.0
830725	1740	10638	0.30	0101	4.000	92.0	0.0010	0.90	0.0010	0.200	88.000	182.0
830822	1810	10656	0.30	0101	4.000	111.0		0.80	0.0005<	0.200	71.000	214.0
830926	1735	10674	0.30	0101	5.000	87.0		1.10	0.0005<	0.200	90.000	185.0
831024	1935	10692	0.30	0101	4.000	65.0	0.0010<	0.50	0.0005<	0.300	90.000	135.0
831121	1755	10710	0.30	0101	6.000	81.0		0.50	0.0005<	0.300	78.000	171.0
831219	1810	10728	0.30	0101	9.000	92.0		0.70	0.0005<	0.400	78.000	188.0
MAXIMUM			0.30		11.000	111.0	0.0010	1.10	0.0020	0.400	97.000	228.0
ARITH MEAN			0.30		6.308	87.2	0.0010	0.63	0.0013	0.292	79.231	179.4
GEOM MEAN					5.906	85.3		0.57		0.274	78.657	176.3
MINIMUM			0.30		4.000	48.0	0.0010	0.20	0.0010	0.100	63.000	104.0
STD DEV (GEOM *)					2.463	17.1		0.29		0.095	9.951	32.2
# SAMP IN STATISTICS			13		13	13	1	13	3	13	13	13
% SAMP (EXCLUDED)							75		76			

*INTERIM		TEST-NAME:	COUT	CRUT	CUUT	DO	FCMF	FEUT	FVPH	FWSTRC	FWTEMP	HARDT
			COBALT	CHROMIUM	COPPER	DISOLVED	FECAL	IRON				HARDNESS
SAMPLE			UNF. TOT.	UNF. TOT.	UNF. TOT.	OXYGEN	COLIFORM	UNF. TOT.			WATER	TOTAL
DATE	HR	SAMPLE	MG/L	MG/L	MG/L	MG/L	HF	MG/L	PH	STREAM	TEMP	MG/L
YYMMDD	LHT	NUMBER	AS CO	AS CR	AS CU	AS O	CNT	AS FE	FIELD	COND.	DEG.C	AS CAC03
830105	0905	10512	0.0020<	0.0020<	0.0010	12.8	8	0.2300	7.5	4	1.0	93.000
830125	0930	10530	0.0020<	0.0020<	0.0010	11.2	8	0.2800	6.9	4	1.0	100.000
830224	1230	10548	0.0020<	0.0020<	0.0010	8.7	4	0.3400	7.1	4	1.0	103.000
830329	0950	10566	0.0020<	0.0050	0.0020	10.0	4	0.4800	7.2	4	1.0	115.000
830425	1950	10584	0.0020<	0.0040	0.0020	8.0	4	0.2900	6.9		1.0	82.000
830524	1715	10602	0.0020<	0.0020	0.0010	9.8	4	0.2200	6.8	3	9.0	54.000
830627	1645	10620	0.0020<	0.0020<	0.0090	8.8	32		7.9		16.2	89.000
830725	1740	10638	0.0020	0.0020	0.0020	6.6	4	0.4300	7.8	0	22.0	99.000
830822	1810	10656	0.0020<	0.0040	0.0020	5.7	4<	0.2800	7.7	0	21.0	123.000
830926	1735	10674	0.0020<	0.0020	0.0010	7.8	16		7.5		11.0	98.000
831024	1935	10692	0.0020<	0.0020<	0.0030	10.6	8	0.1600			3.5	72.000

(C O N T D)

1983 WATER QUALITY DATA REGION 6

46

B.O.W./ SITE: BLACK RIVER
 SAMPLE POINT: ABOVE MOSE LAKE ON ONT.P&P ROAD
 STATION TYPE: RIVER

STATION ID: 01-0060-006-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: PIC RIVER

STORET CODE: 02
 001
 2280

LAT: 49 08 30.01 LONG: 085 44 23.99

U T M: 16 0591900.0 5443750.0 4

REGION: 06

DISTANCE: 133.250

*INTERIM TEST-NAME:		COU	CRUT	CUUT	DO	FCMF FECAL COLIFORM	FEUT	FMPH	FWSTRC	FWTEMP	HARDT
		COBALT UNF.TOT. MG/L AS CO	CHROMIUM UNF.TOT. MG/L AS CR	COPPER UNF.TOT. MG/L AS CU	DISOLVED OXYGEN MG/L AS O	MF CNT /100ML	IRON UNF.TOT. MG/L AS FE	PH FIELD	STREAM COND.	WATER TEMP DEG.C	HARDNESS TOTAL MG/L AS CACO3
SAMPLE DATE YYMMDD	HOUR LMT	SAMPLE NUMBER									
831121	1755	10710	0.0020<	0.0030	0.0010	11.2	4<	0.1500	7.1	0	89.000
831219	1810	10728	0.0020<	0.0030	0.0020	11.8	12	0.1600	7.2	4	100.000
MAXIMUM		0.0020	0.0050	0.0090	12.8	32	0.4800	7.9		22.0	123.000
ARITH MEAN		0.0020	0.0031	0.0022	9.5	9	0.2745	7.3		6.8	93.615
GEOM MEAN				0.0017	9.2		0.2560	7.3			91.867
MINIMUM		0.0020	0.0020	0.0010	5.7	4	0.1500	6.8		0.0	54.000
STD DEV (GEOM *)				0.0022	2.1		0.1085	0.4			17.685
# SAMP IN STATISTICS		1	8	13	13	11	11	12		13	13
% SAMP (EXCLUDED)		92	38			15					

*INTERIM TEST-NAME:		MNUT	NIUT	NNHTFR NH3-N TOTAL	NNO2FR NO2-N FIL.REAC	NNO3FR NO3-N FIL.REAC	NNTKUR K'DAHL N TOTAL	PBUT	PH	PP04FR P04 FIL.REAC	PPUT PHOSPHOR UNF.TOT. MG/L AS P
		MANGANESE UNF.TOT. MG/L AS MN	NICKEL UNF.TOT. MG/L AS NI	FIL.REAC MG/L AS N	FIL.REAC MG/L AS N	FIL.REAC MG/L AS N	UNF.REAC MG/L AS N	LEAD UNF.TOT. MG/L AS PB	PH	AS P	AS P
SAMPLE DATE YYMMDD	HOUR LMT	SAMPLE NUMBER									
830105	0905	10512	0.015	0.002<	0.050	0.004	0.080	0.450	0.003 <	7.30	0.002
830125	0930	10530	0.015	0.002<	0.050	0.004	0.100	0.770	0.003 <	7.30	0.001
830224	1230	10548	0.022	0.002<	0.080	0.003	0.150	0.480	0.003 <	7.00	0.001
830329	0950	10566	0.026	0.003	0.050	0.004	0.170	0.610	0.003 <	7.20	0.001<
830425	1950	10584	0.025	0.002	0.020	0.004	0.180	0.340	0.003	7.10	0.001
830524	1715	10602	0.011	0.002<	0.020	0.005	0.040	0.380	0.003 <	7.30	0.001
830627	1645	10620		0.005	0.010	0.004	0.020	0.440	0.0030<	7.70	0.003
830725	1740	10638	0.044	0.003	0.030	0.003	0.010<	0.530	0.005	7.60	0.002
830822	1810	10656	0.049	0.004	0.020	0.002	0.010<	0.520	0.007	7.50	0.002
830926	1735	10674		0.002<	0.010	0.003	0.010<	0.530	0.003 <	7.50	0.002
831024	1935	10692	0.011	0.002<	0.010	0.004	0.040	0.450	0.003 <	7.40	0.003
831121	1755	10710	0.011	0.002<	0.030	0.001	0.090	0.470	0.003 <	7.30	0.002
831219	1810	10728	0.011	0.002<	0.070	0.003	0.100	0.520	0.003 <	7.10	0.003
MAXIMUM		0.049	0.005	0.080	0.005	0.180	0.770	0.007	7.70	0.003	0.019
ARITH MEAN		0.022	0.003	0.035	0.003	0.097	0.499	0.005	7.33	0.002	0.013
GEOM MEAN		0.019		0.027	0.003		0.490		7.33		0.012
MINIMUM		0.011	0.002	0.010	0.001	0.020	0.340	0.003	7.00	0.001	0.007
STD DEV (GEOM *)		0.013		0.023	0.001		0.107		0.21		0.004
# SAMP IN STATISTICS		11	5	13	13	10	13	3	13	12	13
% SAMP (EXCLUDED)			61			23		76		7	

(CONTD)

1983 WATER QUALITY DATA REGION 6

47

B.O.W./ SITE: BLACK RIVER
 SAMPLE POINT: ABOVE HOSE LAKE ON ONT.P&P ROAD
 STATION TYPE: RIVER

STATION ID: 01-0060-006-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: PIC RIVER

STORET CODE: 02
 001
 2280

LAT: 49 08 30.01 LONG: 085 44 23.99

U T M: 16 0591900.0 5443750.0 4

REGION: 06

DISTANCE: 133.250

*INTERIM TEST-NAME:		RSP	RST	SS04UR	TCMF	TCMFBK	TURB	ZNUT
				SULPHATE	COLIFORM	COLIFORM		
				UNF.REAC	TOTAL	TOTAL MF		ZINC
SAMPLE		RESIDUE	RESIDUE	MG/L	MF	BCKGRD		UNF.TOT.
DATE	HR	PARTIC.	TOTAL	AS S04	CNT	CNT	TURB'ITY	MG/L
YYMMDD	LMT	MG/L	MG/L		/100ML	/100ML	FTU	AS ZN
830105	0905	10512	1.00	120.00	1.600	70AID	340	0.0020
830125	0930	10530	2.00	130.00	3.600	20AID	190	0.0030
830224	1230	10548	2.00	130.00	1.000<	8	176	0.0040
830329	0950	10566	6.00	190.00	2.500	36	92	0.0090
830425	1950	10584	2.00	140.00	3.300	44	152	0.0040
830524	1715	10602	3.00	130.00	4.000	64C	1600	0.0030
830627	1645	10620	5.00	140.00	4.700	500AID	7300	0.0120
830725	1740	10638	5.00	170.00	2.700	800AID	13000	0.0030
830822	1810	10656	2.00	180.00	2.500	300AID	5000	0.0050
830926	1735	10674	1.00	170.00	4.300	300	1100	0.0030
831024	1935	10692	1.00	160.00	4.000	430	1060	0.004
831121	1755	10710	1.00	130.00	5.300	80AID	720	0.003
831219	1810	10728	1.00	150.00	6.000	40AID	200	0.0040
MAXIMUM		6.00	190.00	6.000	800	13000	2.70	0.0120
ARITH MEAN		2.46	149.23	3.708	207	2379	1.16	0.005
GEOM MEAN		1.98	147.71		96	741	1.00	0.004
MINIMUM		1.00	120.00	1.600	8	92	0.50	0.0020
STD DEV (GEOM *)		1.76	22.53		4*	5*	0.72	0.003
# SAMP IN STATISTICS		13	13	12	13	13	13	13
% SAMP (EXCLUDED)				7				

1983 WATER QUALITY DATA REGION 6

48

B.O.W./ SITE: RUDDER CREEK
 SAMPLE POINT: 3 MI.W.OF HWY.614 ON AMERICAN CAN ROAD
 STATION TYPE: RIVER

STATION ID: 01-0060-007-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: PIC RIVER

STORET CODE: 02
 001
 2280

LAT: 49 07 00.61 LONG: 085 54 25.67

U T M: 16 0579750.0 5440800.0 0

REGION: 06

DISTANCE: 96.742

*=INTERIM		TEST-NAME:	FWSADP	FGPROJ	ACDT	ALKT	ASUT	BOD5	CDUT	CLIDUR	COLAP	COND25
					ACIDITY	ALK	ARSENIC	BOD	CADMIUM	CHLORIDE	COLOUR	CONDUCT.
					TOTAL	TOTAL	UNF.TOT.	5 DAY	UNF.TOT.	UNF.REAC	APPARENT	25C
					MG/L	MG/L	MG/L	TOT.DEM.	MG/L	MG/L	HZU	UMHO/CM
					AS CAC03	AS CAC03	AS AS	AS O	AS CD	AS CL-		AT 25 C
SAMPLE	DATE	DATE	DEPT	PROJECT								
DATE	HR	HR	HR	CODE								
YYMMDD	LMT	LMT	M									
YYMMDD	LMT	NUMBER										
830105	0945	10514	0.30	0101	11.000	185.0		1.10		16.500	59.000	449.0
830125	1025	10532	0.30	0101	15.000	255.0	0.0010<	2.30	0.0005<	28.000	54.000	625.0
830224	1138	10550	0.30	0101	21.000	321.0		1.60		38.000	49.000	740.0
830329	1025	10568	0.30	0101	29.000	302.0		3.20		36.000	50.000	700.0
830425	1850	10586	0.30	0101	12.000	187.0	0.0010<	2.70	0.0020	18.000	51.000	473.0
830524	1635	10604	0.30	0101	3.000	95.0		0.90		11.000	69.000	258.0
830627	1605	10622	0.30	0101	9.000	166.0		1.90		14.000	97.000	362.0
830725	1650	10640	0.30	0101	11.000	180.0	0.0010<	1.50	0.0010	19.000	87.000	400.0
830822	1720	10658	0.30	0101	7.000	204.0		0.70		19.000	80.000	422.0
830926	1635	10676	0.30	0101	9.000	164.0		0.90		26.000	56.000	447.0
831024	1835	10694	0.30	0101	5.000	113.0	0.0010	0.60	0.0005<	11.000	89.000	295.0
831121	1715	10712	0.30	0101	7.000	147.0		0.30		16.000	63.000	371.0
831219	1730	10730	0.30	0101	11.000	168.0		1.20		16.000	67.000	408.0
		MAXIMUM	0.30		29.000	321.0	0.0010	3.20	0.0020	38.000	97.000	740.0
		ARITH MEAN	0.30		11.538	191.3	0.0010	1.45	0.0015	20.654	67.000	457.7
		GEOM MEAN			9.892	181.2		1.21		19.141	65.269	437.7
		MINIMUM	0.30		3.000	95.0	0.0010	0.30	0.0010	11.000	49.000	258.0
		STD DEV (GEOM *)			6.936	66.3		0.86		8.769	16.320	146.3
		# SAMP IN STATISTICS	13		13	13	1	13	2	13	13	13
		% SAMP (EXCLUDED)					75		50			
*=INTERIM		TEST-NAME:	COUT	CRUT	CUUT	DO	FCHF	FEUT	FVPH	FWSTRC	FWTEMP	HARDT
							FECAL	IRON				
							COLIFORM	UNF.TOT.				
							HF	MG/L				
							CNT	AS FE				
							/100ML					
SAMPLE	DATE	DATE	DEPT	PROJECT								
DATE	HR	HR	HR	CODE								
YYMMDD	LMT	LMT	M									
YYMMDD	LMT	NUMBER										
830105	0945	10514				11.2	1100		7.0		1.0	188.000
830125	1025	10532	0.0020<	0.0020<	0.0080	11.3	1500	0.2700	7.1	4	1.0	240.000
830224	1138	10550				7.6	3800		7.3	4	1.0	280.000
830329	1025	10568				8.6	490	0.4000	7.2	4	1.0	256.000
830425	1850	10586	0.0020<	0.0020	0.0080	7.5	390	0.4000	7.0	3	1.0	185.000
830524	1635	10604				10.5	10<		7.1	3	8.0	113.000
830627	1605	10622				6.6	10AID		7.8		16.0	174.000
830725	1650	10640	0.0020<	0.0050	0.0030	4.5	10<	0.3600	7.5		22.0	190.000
830822	1720	10658				4.5	10<		7.5	0	19.5	218.000
830926	1635	10676				7.2	10<		7.5		11.0	186.000
831024	1835	10694	0.0020<	0.0020<	0.0040	9.5	10<	0.2200			5.0	133.000

(CONT D)

1983 WATER QUALITY DATA REGION 6

49

B.O.W./ SITE: RUDDER CREEK
 SAMPLE POINT: 3 MI.W.OF HWY.614 ON AMERICAN CAN ROAD
 STATION TYPE: RIVER

STATION ID: 01-0060-007-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: PIC RIVER

STORET CODE: 02
 001
 2280

LAT: 49 07 00.61 LONG: 085 54 25.67 U T M: 16 0579750.0 5440800.0 0 REGION: 06 DISTANCE: 96.742

*=INTERIM TEST-NAME:			COUT	CRUT	CUUT	DO	FCMF FECAL COLIFORM	FEUT	FWPH	FWSTRC	FWTEMP	HARDT
			COBALT UNF.TOT. MG/L AS CO	CHROMIUM UNF.TOT. MG/L AS CR	COPPER UNF.TOT. MG/L AS CU	DISOLVED OXYGEN MG/L AS O	IRON UNF.TOT. MG/L AS FE		PH FIELD	STREAM COND.	WATER TEMP DEG.C	HARDNESS TOTAL MG/L AS CaCO3
SAMPLE DATE YYMMDD	HOUR LMT	SAMPLE NUMBER					MF CNT /100ML					
831121	1715	10712				10.8	4		7.2		2.0	171.000
831219	1730	10730				10.9	8		7.2	4	1.0	188.000
MAXIMUM				0.0050	0.0080	11.3	3800	0.4000	7.8		22.0	280.000
ARITH MEAN				0.0035	0.0057	8.5	913	0.3300	7.3		6.9	194.000
GEOM MEAN					0.0053	8.2		0.3212	7.3		3.3	188.809
MINIMUM				0.0020	0.0030	4.5	4	0.2200	7.0		1.0	113.000
STD DEV (GEOM *)					0.0026	2.4		0.0812	0.2		7.8	45.985
# SAMP IN STATISTICS				2	4	13	8	5	12		13	13
% SAMP (EXCLUDED)				50			38					

*=INTERIM TEST-NAME:			MNUT	NIUT	NNHTFR NH3-N TOTAL	NNO2FR NO2-N FIL.REAC	NNO3FR NO3-N FIL.REAC	NNTKUR K'DAHL N TOTAL	PBUT	PH	PP04FR P04 FIL.REAC	PPUT PHOSPHOR UNF.TOT.
			MANGANESE UNF.TOT. MG/L AS MN	NICKEL UNF.TOT. MG/L AS NI				LEAD UNF.TOT. MG/L AS PB				
SAMPLE DATE YYMMDD	HOUR LMT	SAMPLE NUMBER			MG/L AS N	MG/L AS N	MG/L AS N	MG/L AS N		PH	MG/L AS P	MG/L AS P
830105	0945	10514			2.400	0.012	0.820	2.900		7.60	1.200	1.300
830125	1025	10532	0.200	0.002<	6.500	0.006	0.240	10.000	0.003<	7.50	2.000	2.100
830224	1138	10550			11.000	0.008	0.090	12.000		7.40	2.500	2.700
830329	1025	10568	0.230		9.500	0.005	0.070	12.000		7.40	2.400	2.500
830425	1850	10586	0.170	0.002<	5.000	0.014	0.150	6.000	0.005	7.30	1.300	1.400
830524	1635	10604			0.250	0.010	0.380	0.600		7.80	0.280	0.280
830627	1605	10622			0.110	0.030	0.260	0.930		7.60	0.920	1.000
830725	1650	10640	0.076	0.007	0.080	0.036	0.080	0.870	0.013	7.50	1.000	1.000
830822	1720	10658			0.060	0.008	0.060	0.740		7.50	0.088	1.000
830926	1635	10676			0.020	0.004	0.050	0.700		7.50	0.390	0.440
831024	1835	10694	0.006	0.002	0.010	0.009	0.630	0.660	0.003<	7.50	0.260	0.270
831121	1715	10712			0.170	0.013	1.300	0.770		7.50	0.490	0.490
831219	1730	10730			0.850	0.012	1.400	1.500		7.30	0.940	0.880
MAXIMUM			0.230	0.007	11.000	0.036	1.400	12.000	0.013	7.80	2.500	2.700
ARITH MEAN			0.136	0.004	2.765	0.013	0.425	3.821	0.009	7.49	1.059	1.182
GEOM MEAN			0.081		0.450	0.011	0.230	1.920		7.49	0.740	0.926
MINIMUM			0.006	0.002	0.010	0.004	0.050	0.600	0.005	7.30	0.088	0.270
STD DEV (GEOM *)			0.093		3.934	0.010	0.473	4.555		0.13	0.808	0.807
# SAMP IN STATISTICS			5	2	13	13	13	13	2	13	13	13
% SAMP (EXCLUDED)				50					50			

(C O N T D)

1983 WATER QUALITY DATA REGION 6

50

B.O.W./ SITE: RUDDER CREEK
 SAMPLE POINT: 3 MI.W.OF HWY.614 ON AMERICAN CAN ROAD
 STATION TYPE: RIVER

STATION ID: 01-0060-007-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: PIC RIVER

STORET CODE: 02
 001
 2280

LAT: 49 07 00.61 LONG: 085 54 25.67

U T M: 16 0579750.0 5440800.0 0 REGION: 06

DISTANCE: 96.742

*INTERIM TEST-NAME:		RSP	RST	SS04UR	TCMF	TCMFBK	TURB	ZNUT
		RESIDUE	RESIDUE	SULPHATE	COLIFORM	COLIFORM		ZINC
SAMPLE		PARTIC.	TOTAL	UNF.REAC	TOTAL	TOTAL MF		UNF.TOT.
DATE	HR	MG/L	MG/L	MG/L	MF	BCKGRD	TURB'ITY	MG/L
YYMMDD	LMT	SAMPLE		AS S04	CNT	CNT	FTU	AS ZN
		NUMBER			/100ML	/100ML		
830105	0945	10514	8.00	280.00	14.000	2700	5200	0.60
830125	1025	10532	3.00	350.00	22.000	3800	3900	0.80
830224	1138	10550	2.00	400.00	25.000	5900	7100	2.90
830329	1025	10568	2.00	400.00	28.000	1100	1200	1.40
830425	1850	10586	6.00	290.00	21.000	1400	4800	0.80
830524	1635	10604	3.00	180.00	13.000	100<	2200	0.50
830627	1605	10622	5.00	260.00	10.000	5000	15400	1.10
830725	1650	10640	2.00	300.00	9.100	800AID	22000	0.70
830822	1720	10658	2.00	310.00	5.000	400AID	11400	0.90
830926	1635	10676	1.00	300.00	27.000	500C	700000	0.30
831024	1835	10694	15.00	290.00	14.000	600AID	18000	1.70
831121	1715	10712	1.00	250.00	20.000	70AID	610	0.30
831219	1730	10730	1.00	280.00	19.000	190	500	0.35
MAXIMUM		15.00	400.00	28.000	5900	700000	2.90	0.0090
ARITH MEAN		3.92	299.23	17.469	1872	60953	0.95	0.005
GEOM MEAN		2.75	293.61	15.807		6419	0.76	0.005
MINIMUM		1.00	180.00	5.000	70	580	0.30	0.003
STD DEV (GEOM *)		3.95	59.23	7.220		6*	0.72	0.003
# SAMP IN STATISTICS		13	13	13	12	13	13	4
% SAMP (EXCLUDED)					7			

1983 WATER QUALITY DATA REGION 6

51

B.O.W./ SITE: FOX CREEK
 SAMPLE POINT: AT INFLOW TO MANITOWADGE LAKE
 STATION TYPE: RIVER

STATION ID: 01-0060-008-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: PIC RIVER

STORET CODE: 02
 001
 2280

LAT: 49 08 40.19 LONG: 085 47 38.71 U T M: 16 0587950.0 5444000.0 4 REGION: 06 DISTANCE: 138.239

*=INTERIM TEST-NAME:		FWSADP	FGPROJ	ACDT	ALKT	ASUT	BOD5	CDUT	CLIDUR	COLAP	COND25
				ACIDITY	ALK	ARSENIC	BOD	CADMIUM	CHLORIDE	COLOUR	CONDUCT.
SAMPLE		SAMPLE	PROJECT	TOTAL	TOTAL	UNF.TOT.	5 DAY	UNF.TOT.	UNF.REAC	APPARENT	25C
DATE	HR	DEPTH	SUB-PROJ	MG/L	MG/L	MG/L	TOT.DEM.	MG/L	MG/L	MG/L	UMHO/CM
YYMMDD	LMT	M	CODE	AS CAC03	AS CAC03	AS AS	AS O	AS CD	AS CL-	HZU	AT 25 C
830105	0835	10510	0101	14.000	71.0		0.70	0.0025	1.100		265.0
830125	0850	10528	0101	12.000	78.0	0.0010<	0.40	0.0013	1.200		295.0
830224	1155	10546	0101	10.000	84.0		0.40	0.0020	1.200		336.0
830329	0905	10564	0101	12.000	84.0		0.70	0.0050	1.800		303.0
830425	1915	10582	0101	15.000	63.0	0.0010<	0.30	0.0090	3.300	154.000	298.0
830524	1650	10600	0101	4.000	45.0		0.50	0.0014	0.900	102.000	138.0
830627	1620	10618	0101	5.000	75.0		0.90	0.0005<	1.200	160.000	252.0
830725	1705	10636	0101	7.000	80.0	0.0010<	1.30	0.0030	1.400	137.000	236.0
830822	1740	10654	0101	15.000	48.0		0.40	0.0011	5.400	111.000	448.0
830926	1700	10672	0101	8.000	78.0		1.20	0.0018	2.200	114.000	283.0
831024	1900	10690	0101	8.000	46.0	0.0010<	0.60	0.0026	0.900	148.000	170.0
831121	1730	10708	0101	11.000	64.0		0.70	0.0010	1.000	175.000	236.0
831219	1840	10726	0101	11.000	71.0		0.70	0.0013	1.200	147.000	238.0
MAXIMUM		0.30		15.000	84.0		1.30	0.0090	5.400	175.000	448.0
ARITH MEAN		0.30		10.154	68.2		0.68	0.0027	1.754	138.667	269.1
GEOM MEAN				9.469	66.7		0.62		1.493	136.626	259.0
MINIMUM		0.30		4.000	45.0		0.30	0.0010	0.900	102.000	138.0
STD DEV (GEOM *)				3.579	14.1		0.31		1.281	24.718	76.3
# SAMP IN STATISTICS		13		13	13		13	12	13	9	13
% SAMP (EXCLUDED)								7			

*=INTERIM TEST-NAME:		COBT	CRUT	CUUT	DO	FCMF	FEUT	FVPH	FWSTRC	FWTEMP	HARDT
		COBALT	CHROMIUM	COPPER	DISOLVED	FECAL	IRON				HARDNESS
SAMPLE		UNF.TOT.	UNF.TOT.	UNF.TOT.	OXYGEN	COLIFORM	UNF.TOT.			WATER	TOTAL
DATE	HR	MG/L	MG/L	MG/L	MG/L	MF	MG/L	PH	STREAM	TEMP	MG/L
YYMMDD	LMT	AS CO	AS CR	AS CU	AS O	CNT	AS FE	FIELD	COND.	DEG.C	AS CAC03
830105	0835	0.0020<	0.0020<	0.0210	10.0	4	3.0000	7.0	4	0.5	123.000
830125	0850	0.0020<	0.0020<	0.1900	12.6	236	6.0000	6.7		1.0	144.000
830224	1155	0.0020	0.0020	0.0170	9.9	600>	7.2000	6.95		1.0	161.000
830329	0905	0.0020<	0.0030	0.0570	11.8	10AID	6.7000	6.9		1.0	144.000
830425	1915	0.0020	0.0050	0.0840	8.8	10AID	4.9000	6.6	9	1.0	134.000
830524	1650	0.0020<	0.0020<	0.0290	10.6	80	1.2000	6.85	9 0 3	7.5	67.000
830627	1620	0.0020<	0.0020<	0.0190	7.8	940		7.4		18.0	126.000
830725	1705	0.0020<	0.0060	0.0240	6.9	1500>	2.4000	7.3	9	23.0	122.000
830822	1740	0.0020<	0.0180	0.1300	5.8	30AID	5.0000	6.9	9 7	23.0	227.000
830926	1700	0.0020<	0.0020	0.0280	7.1	810		7.2		14.0	140.000
831024	1900	0.0020<	0.0020	0.0480	10.9	10<	1.3000			3.5	82.000

(C O N T D)

1983 WATER QUALITY DATA REGION 6

52

B.O.W./ SITE: FOX CREEK
 SAMPLE POINT: AT INFLOW TO MANITOWADGE LAKE
 STATION TYPE: RIVER

STATION ID: 01-0060-008-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: PIC RIVER

STORET CODE: 02
 001
 2280

LAT: 49 08 40.19 LONG: 085 47 38.71 U T M: 16 0587950.0 5444000.0 4 REGION: 06 DISTANCE: 138.239

*INTERIM TEST-NAME:		COUT	CRUT	CUUT	DO	FCHF FECAL	FEUT	FMPH	FWSTRC	FWTEMP	HARDT
		COBALT UNF.TOT. MG/L AS CO	CHROMIUM UNF.TOT. MG/L AS CR	COPPER UNF.TOT. MG/L AS CU	DISOLVED OXYGEN MG/L AS O	COLIFORM MF CNT /100ML	IRON UNF.TOT. MG/L AS FE	PH FIELD	STREAM COND.	WATER TEMP DEG.C	HARDNESS TOTAL MG/L AS CACO3
SAMPLE DATE	HR										
YYMMDD	LMT	SAMPLE NUMBER									
831121	1730	10708	0.0020<	0.0070	0.0120	10.8	380	3.4000	6.7	2.0	118.000
831219	1840	10726	0.0020<	0.0020	0.0150	12.8	440	2.9000	7.0	1.0	118.000
MAXIMUM		0.0020	0.0180	0.1900	12.8	940	7.2000	7.4	23.0	227.000	
ARITH MEAN		0.0020	0.0052	0.0518	9.7	294	4.0000	7.0	7.4	131.231	
GEOM MEAN				0.0354	9.4		3.4349	7.0	3.2	126.185	
MINIMUM		0.0020	0.0020	0.0120	5.8	4	1.2000	6.6	0.5	67.000	
STD DEV (GEOM *)				0.0535	2.2		2.0881	0.2	8.8	38.241	
# SAMP IN STATISTICS		2	9	13	13	10	11	12	13	13	
% SAMP (EXCLUDED)		84	30			23					

*INTERIM TEST-NAME:		MNUT	NIUT	NNHTFR NH3-N TOTAL	NNO2FR NO2-N FIL.REAC	NNO3FR NO3-N FIL.REAC	NNTKUR K'DAHL N TOTAL	PBUT LEAD UNF.TOT.	PH	PP04FR P04 FIL.REAC	PPUT PHOSPHOR UNF.TOT.
		MANGANESE UNF.TOT. MG/L AS MN	NICKEL UNF.TOT. MG/L AS NI	FIL.REAC MG/L AS N	FIL.REAC MG/L AS N	FIL.REAC MG/L AS N	UNF.REAC MG/L AS N	UNF.TOT. MG/L AS PB	PH	FIL.REAC MG/L AS P	UNF.TOT. MG/L AS P
SAMPLE DATE	HR										
YYMMDD	LMT	SAMPLE NUMBER									
830105	0835	10510	0.160	0.002	0.210	0.008	0.110	0.620	0.003 <	7.10	0.002
830125	0850	10528	0.170	0.002<	0.200	0.009	0.130	0.710	0.003 <	7.10	0.004
830224	1155	10546	0.340	0.002<	0.280	0.010	0.190	0.670	0.003 <	6.80	0.004
830329	0905	10564	0.220	0.010	0.220	0.008	0.190	0.500	0.006	7.10	0.003
830425	1915	10582	0.210	0.005	0.230	0.008	0.280	0.540	0.007	6.80	0.003
830524	1650	10600	0.050	0.002<	0.040	0.006	0.080	0.430	0.003	7.30	0.001
830627	1620	10618		0.002<	0.190	0.009	0.930	0.640	0.0030<	7.30	0.002
830725	1705	10636	0.220	0.007	0.080	0.007	0.050	0.620	0.011	7.30	0.002
830822	1740	10654	0.800	0.014	0.900	0.008	0.360	1.800	0.015	6.60	0.003
830926	1700	10672		0.003	0.060	0.006	0.060	0.600	0.003 <	7.20	0.004
831024	1900	10690	0.110	0.002<	0.130	0.007	0.070	0.590	0.003 <	7.10	0.003
831121	1730	10708	0.140	0.007	0.140	0.007	0.110	0.590	0.003 <	6.80	0.005
831219	1840	10726	0.140	0.003	0.180	0.007	0.150	0.620	0.003	6.90	0.004
MAXIMUM		0.800	0.014	0.900	0.010	0.930	1.800	0.015	7.30	0.005	0.080
ARITH MEAN		0.233	0.006	0.220	0.008	0.208	0.687	0.007	7.03	0.003	0.024
GEOM MEAN		0.184		0.164	0.008	0.146	0.642		7.03	0.003	0.018
MINIMUM		0.050	0.002	0.040	0.006	0.050	0.430	0.003	6.60	0.001	0.008
STD DEV (GEOM *)		0.202		0.216	0.001	0.235	0.342		0.23	0.001	0.022
# SAMP IN STATISTICS		11	8	13	13	13	13	6	13	13	13
% SAMP (EXCLUDED)			38					53			

(CONT'D)

1983 WATER QUALITY DATA REGION 6

53

B.O.W./ SITE: FOX CREEK
 SAMPLE POINT: AT INFLOW TO MANITOWADGE LAKE
 STATION TYPE: RIVER

STATION ID: 01-0060-008-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: PIC RIVER

STORET CODE: 02
 001
 2280

LAT: 49 08 40.19 LONG: 085 47 38.71

U T M: 16 0587950.0 5444000.0 4

REGION: 06

DISTANCE: 138.239

*INTERIM TEST-NAME:		RSP	RST	SS04UR	TCMF COLIFORM TOTAL HF	TCMFBK COLIFORM TOTAL HF BCKGRD CNT	TURB TURB'ITY FTU	ZNUT ZINC UNF.TOT. MG/L AS ZN
SAMPLE DATE YYMMDD	HOURL LMT	SAMPLE NUMBER	RESIDUE PARTIC. MG/L	RESIDUE TOTAL MG/L	SULPHATE UNF.REAC MG/L AS SO4	CNT /100ML	CNT /100ML	
830105	0835	10510	1.00	220.00	54.000	30AID	490	2.60
830125	0850	10528	2.00	190.00	69.000	470	220	4.50
830224	1155	10546	9.00	250.00	82.000	1500>	1100	8.40
830329	0905	10564	2.00	250.00	66.000	50AID	210	5.90
830425	1915	10582	6.00	250.00	78.000	170	240	8.60
830524	1650	10600	7.00	130.00	20.000	190	810	3.30
830627	1620	10618	2.00	200.00	5.200	1500>	8000	3.20
830725	1705	10636	3.00	210.00	36.000	15000>	100000>	5.40
830822	1740	10654	15.00	410.00	175.000	600AID	8000	36.00
830926	1700	10672	2.00	240.00	56.000	2000C	100000>	3.70
831024	1900	10690	1.00	180.00	31.000	500AID	2000	2.10
831121	1730	10708	1.00	200.00	53.000	1100	3900	1.80
831219	1840	10726	1.00	210.00	46.000	1500	7700	2.30
		MAXIMUM	15.00	410.00	175.000	2000	8000	36.00
		ARITH MEAN	4.00	226.15	59.323	661	2970	6.75
		GEOM MEAN	2.62	218.92	46.194			4.52
		MINIMUM	1.00	130.00	5.200	30	210	1.80
		STD DEV (GEOM %)	4.20	64.75	41.293			9.07
		# SAMP IN STATISTICS	13	13	13	10	11	13
		% SAMP (EXCLUDED)				23	15	

1983 WATER QUALITY DATA REGION 6

54

B.O.W./ SITE: LITTLE BLACK RIVER
 SAMPLE POINT: HWY 17
 STATION TYPE: RIVER

STATION ID: 01-0060-009-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: PIC RIVER

STORET CODE: 02
 001
 2280

LAT: 48 41 28.71 LONG: 085 57 13.45

U T M: 16 0577000.0 5393450.0 4

REGION: 06

DISTANCE: 22.720

*=INTERIM TEST-NAME:		FWSADP	FGPROJ	ACDT	ALKT	ALUT	ASUT	AS3UR	AS5UR	BOD5	CAUR
				ACIDITY	ALK	ALUMINUM	ARSENIC	ARSENITE	ARSENATE	BOD	CALCIUM
SAMPLE		SAMPLE	PROJECT	TOTAL	TOTAL	UNF.TOT.	UNF.TOT.	UNF.REAC	UNF.REAC	5 DAY	UNF.REAC
DATE	HR	DEPTH	SUB-PROJ	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
YYMMDD	LMT	NUMBER	CODE	AS CAC03	AS CAC03	AS AL	AS AS	AS AS	AS AS	AS O	AS CA
830125	1200	10523	0101	6.000	16.0	0.180	0.001 <			0.40	7.800
830224	1405	10541	0101	9.000	21.0	0.220	0.0010<			0.40	9.300
830329	1135	10559	0101	6.000	19.0	0.200	0.0010			0.40	11.000
830425	1630	10577	0101	7.000	14.0	0.270	0.0010<			0.30	9.300
830524	1425	10595	0101	4.000	11.0	0.190	0.0010<			0.30	6.300
830627	1400	10613	0101	7.000	18.0	0.130	0.0010			0.40	9.000
830725	1510	10631	0101	4.000	21.0	0.064	0.0010			1.40	11.000
830822	1500	10649	0101	4.000	26.0	0.095	0.0010<			0.50	14.000
830926	1410	10667	0101	4.000	24.0	0.070	0.0010<			1.00	13.000
831024	1550	10685	0101	6.000	12.0	0.290	0.0010<	0.001<	0.001<	0.50	6.900
831121	1440	10703	0101	5.000	16.0	0.200	0.0010			0.40	8.700
831220	1020	10721	0101	9.000	13.0	0.260	0.0011			1.00	7.300
MAXIMUM		0.30		9.000	26.0	0.290	0.0011			1.40	14.000
ARITH MEAN		0.30		5.917	17.6	0.181	0.0010			0.58	9.467
GEOM MEAN				5.667	17.0	0.162				0.51	9.203
MINIMUM		0.30		4.000	11.0	0.064	0.0010			0.30	6.300
STD DEV (GEOM *)				1.832	4.8	0.076				0.35	2.387
# SAMP IN STATISTICS		12		12	12	12	5			12	12
% SAMP (EXCLUDED)							58				

*=INTERIM TEST-NAME:		CCHAU	CCNFUR	CDUT	CLIDUR	COD	COLAP	COND25	COUT	CRUT	CUUT
		CYANIDE	CYANIDE	CADMIUM	CHLORIDE	CHEM. OX	COLOUR	CONDUCT.	COBALT	CHROMIUM	COPPER
SAMPLE		AVAIL	FREE	UNF.TOT.	UNF.REAC	DEMAND	APPARENT	25C	UNF.TOT.	UNF.TOT.	UNF.TOT.
DATE	HR	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	UMHO/CM	MG/L	MG/L	MG/L
YYMMDD	LMT	AS HCN	AS HCN	AS CD	AS CL-	AS O	HZU	AT 25 C	AS CO	AS CR	AS CU
830125	1200	10523	0.001<	0.0005<	3.900	23	105.000	66.0	0.002 <	0.002 <	0.004
830224	1405	10541	0.001<	0.0010	6.600	32	101.000	80.0	0.0020<	0.0020<	0.0020
830329	1135	10559	0.001<	0.0010	22.000	30	88.000	135.0	0.0020<	0.0020<	0.0020
830425	1630	10577	0.001<	0.0010	21.000	22	99.000	125.0	0.0020<	0.0020<	0.0020
830524	1425	10595	0.003<	0.0005<	6.700	29	96.000	61.0	0.0020<	0.0050	0.0020
830627	1400	10613	0.001<	0.0005<	11.000	36	76.000	90.0	0.0020<	0.0020<	0.0020
830725	1510	10631	0.001<	0.0010	16.000	25	63.000	109.0	0.0020<	0.0040	0.0020
830822	1500	10649	0.001<	0.0005<	24.000	21	59.000	164.0	0.0020<	0.0020<	0.0030
830926	1410	10667	0.001	0.0005<	21.000	35	66.000	143.0	0.0020<	0.0020	0.0020
831024	1550	10685	0.001<	0.0005<	2.900	44	121.000	58.0	0.0020<	0.0020<	0.0030
831121	1440	10703	0.001<	0.0005<	8.200	34	125.000	83.0	0.0020<	0.0030	0.0020
831220	1020	10721	0.001<	0.0005<	3.400	44	133.000	62.0	0.0020<	0.0020<	0.0040

(C O N T D)

1983 WATER QUALITY DATA REGION 6

55

B.O.W./ SITE: LITTLE BLACK RIVER
 SAMPLE POINT: HWY 17
 STATION TYPE: RIVER

STATION ID: 01-0060-009-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: PIC RIVER

STORET CODE: 02
 001
 2280

LAT: 48 41 28.71 LONG: 085 57 13.45 U T M: 16 0577000.0 5393450.0 4 REGION: 06 DISTANCE: 22.720

*=-INTERIM TEST-NAME:		CCNAUR CYANIDE AVAIL	CCNFUR CYANIDE FREE	CDUT CADMIUM UNF. TOT.	CLIDUR CHLORIDE UNF. REAC	COD CHEM. OX DEMAND	COLAP COLOUR APPARENT	COND25 CONDUCT. 25C	COUT COBALT UNF. TOT.	CRUT CHROMIUM UNF. TOT.	CUUT COPPER UNF. TOT.
SAMPLE DATE YYMMDD	HOUR LMT	SAMPLE NUMBER	MG/L AS HCN	MG/L AS HCN	MG/L AS CD	MG/L AS CL-	MG/L AS O	UMHO/CM AT 25 C	MG/L AS CO	MG/L AS CR	MG/L AS CU
MAXIMUM		0.001	0.001	0.0010	24.000	44	133.000	164.0		0.0050	0.0040
ARITH MEAN		0.001	0.001<A	0.0010	12.225	31	94.333	98.0		0.0035	0.002
GEOM MEAN					9.544	30	91.236	92.1			0.002
MINIMUM		0.001	0.001	0.0010	2.900	21	59.000	58.0		0.0020	0.0020
STD DEV (GEOM *)					8.070	8	24.751	36.3			0.001
# SAMP IN STATISTICS		1	9	4	12	12	12	12		4	12
% SAMP (EXCLUDED)		91	10	66						66	

*=-INTERIM TEST-NAME:		DO DISOLVED OXYGEN	FCMF FECAL COLIFORM	FEUT IRON UNF. TOT.	FSMF FECAL STREPCUS	FMPH PH FIELD	FWSTRC STREAM COND.	FWTEMP WATER TEMP	HARDT HARDNESS TOTAL	HGUT MERCURY UNF. TOT.	KKUR POTASSIUM UNF. REAC
SAMPLE DATE YYMMDD	HOUR LMT	SAMPLE NUMBER	MG/L AS O	CNT /100ML	MG/L AS FE	CNT /100ML		DEG.C	AS CAC03	UG/L AS HG	MG/L AS K
830125	1200	10523	13.8	4<	0.300	4<	6.6	0.5	24.000	0.050<	0.32
830224	1405	10541	9.1	4<	0.2900	4<	6.65	1.0	26.000	0.050<	0.35
830329	1135	10559	10.8	4<	0.3400	4<	6.7	0.5	34.000	0.050<	0.40
830425	1630	10577	11.2	4	0.3100	4	6.4	1.5	28.000	0.050<	0.37
830524	1425	10595	10.6	4	0.2200	4<	6.2	11.0	19.000	0.050<	0.33
830627	1400	10613	8.2	4	0.1900	312	7.2	17.0	27.000	0.050<	0.44
830725	1510	10631	5.9	4<	0.1600	600>	7.0	24.0	33.000	0.050<	0.50
830822	1500	10649	5.4	16	0.4700	1600>	7.3	23.0	44.000	0.050<	0.63
830926	1410	10667	9.1	4<	0.1800	40	7.0	12.0	41.000	0.050<	0.47
831024	1550	10685	9.3	4<	0.3000	4	6.70	5.0	20.000	0.060	0.44
831121	1440	10703	10.6	4<	0.2200	4<	6.5	3.0	28.000	0.050<	0.51
831220	1020	10721	10.2	4<		4<	6.5	1.0	23.000	0.050<	0.37
MAXIMUM		13.8	16	0.4700	312	7.3		24.0	44.000	0.060	0.63
ARITH MEAN		9.5	7	0.271	90	6.7		8.3	28.917	0.060	0.43
GEOM MEAN		9.2		0.258		6.7		3.7	28.015		0.42
MINIMUM		5.4	4	0.1600	4	6.2		0.5	19.000	0.060	0.32
STD DEV (GEOM *)		2.3		0.090		0.3		8.9	7.786		0.09
# SAMP IN STATISTICS		12	4	11	4	12		12	12	1	12
% SAMP (EXCLUDED)			66		66					91	

(C O N T D)

1983 WATER QUALITY DATA REGION 6

56

B.O.W./ SITE: LITTLE BLACK RIVER
 SAMPLE POINT: HWY 17
 STATION TYPE: RIVER

STATION ID: 01-0060-009-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: PIC RIVER

STORET CODE: 02
 001
 2280

LAT: 48 41 28.71 LONG: 085 57 13.45

U T M: 16 0577000.0 5393450.0 4

REGION: 06

DISTANCE: 22.720

*INTERIM TEST-NAME:		MGUR	MNUT	NAUR	NIUT	NNHTFR	NNKUR	NNO2FR	NNO3FR	NNTIFR	NNTKUR
		MAGNESIUM	MANGANESE	SODIUM	NICKEL	NH3-N	KJELDAHL	NO2-N	NO3-N	INORG N	K'DAHL N
		FIL.REAC	UNF.TOT.	UNF.REAC	UNF.TOT.	TOTAL	ORGANIC	FIL.REAC	FIL.REAC	FIL.REAC	UNF.REAC
		MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
		AS MG	AS MN	AS NA	AS NI	AS N	AS N	AS N	AS N	AS N	AS N
SAMPLE											
DATE	TIME										
YYMMDD	LMT	SAMPLE									
		NUMBER									
830125	1200	10523	1.200	0.008	2.700	0.002	0.060	0.350	0.004	0.160	0.224
830224	1405	10541	1.400	0.012	4.100	0.002	0.050		0.004	0.190	0.400
830329	1135	10559	1.400	0.020	12.000	0.005	0.050		0.003	0.240	0.430
830425	1630	10577	1.200	0.024	14.500	0.002<	0.050		0.004	0.220	0.390
830524	1425	10595	0.890	0.020	4.200	0.002	0.020		0.005	0.080	0.370
830627	1400	10613	1.200	0.035	6.700	0.003	0.010		0.004	0.070	0.390
830725	1510	10631	1.400	0.060	8.900	0.004	0.030		0.003	0.100	0.360
830822	1500	10649	2.100	0.180	18.000	0.003	0.010<		0.003	0.150	0.360
830926	1410	10667	2.100	0.025	14.000	0.002	0.010<		0.002	0.070	0.440
831024	1550	10685	1.100	0.017	2.700	0.003	0.010		0.006	0.110	0.500
831121	1440	10703	1.300	0.014	6.400	0.002<	0.020		0.004	0.180	0.530
831220	1020	10721	1.200		2.900	0.002<	0.050		0.005	0.280	0.540
MAXIMUM			2.100	0.180	18.000	0.005	0.060	0.350	0.006	0.280	0.540
ARITH MEAN			1.374	0.038	8.092	0.003	0.035	0.350	0.004	0.154	0.427
GEOM MEAN			1.335	0.025	6.537				0.004	0.139	0.423
MINIMUM			0.890	0.008	2.700	0.002	0.010	0.350	0.002	0.070	0.360
STD DEV (GEOM *)			0.368	0.049	5.318				0.001	0.070	0.064
# SAMP IN STATISTICS		12		11	12	9	10	1	12	12	1
% SAMP (EXCLUDED)						25	16				12
*INTERIM TEST-NAME:		PBUT	PH	PP04FR	PPUT	PSAMF	RSF	RSP	RST	SI03UR	SS04UR
		LEAD		P04	PHOSPHOR	PSEUDOMN				SILICATE	SULPHATE
		UNF.TOT.		FIL.REAC	UNF.TOT.	AERUG.	RESIDUE	RESIDUE	RESIDUE	UNF.REAC	UNF.REAC
		MG/L		MG/L	MG/L	MF	RESIDUE	PARTIC.	TOTAL	MG/L	MG/L
		AS PB	PH	AS P	AS P	CNT	FILTERED	MG/L	MG/L	AS SI	AS S04
						/100ML					
830125	1200	10523	0.003<	6.90	0.005	0.008	1<	69.00	1.00	70.00	3.300
830224	1405	10541	0.003<	6.50	0.001	0.006		69.000	1.00	70.00	3.300
830329	1135	10559	0.003<	6.60	0.001<	0.009	1<	119.00	1.00	120.00	3.200
830425	1630	10577	0.003	6.50	0.001<	0.010	1<	109.00	109.000	110.00	3.200
830524	1425	10595	0.003<	6.40	0.001<	0.008	1<	84.00	84.000	85.00	2.100
830627	1400	10613	0.035	6.80	0.002	0.010		74.000	1.00	75.00	1.200
830725	1510	10631	0.003<	6.80	0.002	0.004		119.00	1.00	120.00	0.900
830822	1500	10649	0.004	7.20	0.002	0.007		109.00	1.00	110.00	1.000
830926	1410	10667	0.003<	7.10	0.001<	0.012		139.00	1.00	140.00	1.400
831024	1550	10685	0.003<	6.40	0.003	0.012		69.00	1.00	70.00	2.400
831121	1440	10703	0.003<	6.80	0.003	0.010		79.00	1.00	80.00	2.600
831220	1020	10721	0.003<	6.2	0.004	0.012		89.000	1.00	90.00	8.600

(CONT'D)

1983 WATER QUALITY DATA REGION 6

57

B.O.W./ SITE: LITTLE BLACK RIVER
 SAMPLE POINT: HWY 17
 STATION TYPE: RIVER

STATION ID: 01-0060-009-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: PIC RIVER

STORET CODE: 02
 001
 2280

LAT: 48 41 28.71 LONG: 085 57 13.45 U T M: 16 0577000.0 5393450.0 4 REGION: 06 DISTANCE: 22.720

*INTERIM TEST-NAME:		PBUT	PH	PP04FR	PPUT	PSAMF PSEUDOMN AERUG.	RSF	RSP	RST	SI03UR	SS04UR
SAMPLE		LEAD UNF.TOT. MG/L		P04 FIL.REAC MG/L	PHOSPHOR UNF.TOT. MG/L	MF CNT /100ML	RESIDUE FILTERED MG/L	RESIDUE PARTIC. MG/L	RESIDUE TOTAL MG/L	SILICATE UNF.REAC MG/L	SULPHATE UNF.REAC MG/L
DATE	HOUR	AS PB	PH	AS P	AS P					AS SI	AS S04
YYMMDD	LMT	SAMPLE NUMBER									
		MAXIMUM	0.035	7.20	0.005	0.012	139.00	109.000	140.00	3.300	9.300
		ARITH MEAN	0.014	6.7	0.003	0.009	94.00	16.92	95.00	2.236	7.633
		GEOM MEAN		6.7		0.009	91.31	2.14	92.33	2.014	7.537
		MINIMUM	0.003	6.2	0.001	0.004	69.00	1.00	70.00	0.900	5.800
		STD DEV (GEOM *)		0.3		0.003	24.03	37.55	24.03	0.969	1.237
		# SAMP IN STATISTICS	3	12	8	12	12	12	12	11	12
		% SAMP (EXCLUDED)	75		33						

*INTERIM TEST-NAME:		TCHF COLIFORM TOTAL MF CNT /100ML	TCHFBK COLIFORM TOTAL MF BCKGRD CNT /100ML	TURB TURB'ITY FTU	ZNUT ZINC UNF.TOT. MG/L AS ZN
DATE	HOUR	SAMPLE NUMBER			
YYMMDD	LMT				
830125	1200	10523	10AID	100	0.40
830224	1405	10541	10<	120	0.50
830329	1135	10559	10<	460	0.40
830425	1630	10577	40AID	280	0.40
830524	1425	10595	20C	3000	0.40
830627	1400	10613	80C	4000	0.30
830725	1510	10631	70C	5300	0.30
830822	1500	10649	1200	20000	0.70
830926	1410	10667	170	690	0.60
831024	1550	10685	80AID	400	0.55
831121	1440	10703	40AID	210	0.50
831220	1020	10721	80AID	120	0.55
		MAXIMUM	1200	20000	0.70
		ARITH MEAN	179	2890	0.47
		GEOM MEAN		699	0.45
		MINIMUM	10	100	0.30
		STD DEV (GEOM *)		6*	0.12
		# SAMP IN STATISTICS	10	12	12
		% SAMP (EXCLUDED)	16		

1983 WATER QUALITY DATA REGION 6

58

B.O.W./ SITE: CEDAR CREEK
 SAMPLE POINT: HWY 17
 STATION TYPE: RIVER

STATION ID: 01-0060-010-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: PIC RIVER

STORET CODE: 02
 001
 2280

LAT: 48 41 47.30				LONG: 085 52 51.34				U T M: 16 0582350.0 5394100.0 4				REGION: 06		DISTANCE: 3.200	
*=INTERIM		TEST-NAME:	FWSADP	FGPROJ	ACDT	ALKT	ALUT	ASUT	AS3UR	ASSUR	BOD5	CAUR			
					ACIDITY	ALK	ALUMINUM	ARSENIC	ARSENITE	ARSENATE	BOD	CALCIUM			
SAMPLE			SAMPLE	PROJECT	TOTAL	TOTAL	UNF. TOT.	UNF. TOT.	UNF. REAC	UNF. REAC	5 DAY	UNF. REAC			
DATE	HOUR	SAMPLE	DEPTH	SUB-PROJ	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	TOT. DEM.	MG/L			
YYMMDD	LMT	NUMBER	M	CODE	AS CACO3	AS CACO3	AS AL	AS AS	AS AS	AS AS	AS O	AS CA			
830124	1700	10524	0.30	0101	5.000	56.0	0.040	0.0010<			0.40	17.000			
830224	1346	10542	0.30	0101	5.000	55.0	0.060	0.0010<			0.40	18.000			
830328	1846	10560	0.30	0101	5.000	58.0	0.050	0.0010<			0.60	18.000			
830425	1645	10578	0.30		6.000	45.0	0.100	0.0010<			0.40	17.000			
830524	1440	10596	0.30	0101	4.000	40.0	0.050	0.0010<			0.30	14.000			
830627	1410	10614	0.30	0101	3.000	51.0	0.080	0.0010			0.70	16.000			
830725	1530	10632	0.30	0101	5.000	54.0	0.054	0.0010			1.20	18.000			
830822	1520	10650	0.30	0101	5.000	57.0	0.085	0.0010<			0.70	19.000			
830926	1435	10668	0.30	0101	4.000	55.0	0.040	0.0010<			1.00	18.000			
831024	1610	10686	0.30	0101	4.000	54.0	0.045	0.0010<	0.001<	0.001<	0.70	17.000			
831121	1500	10704	0.30	0101	3.000	53.0	0.040	0.0010<			0.70	17.000			
831220	0955	10722	0.30	0101	4.000	57.0	0.029	0.0011				18.000			
MAXIMUM			0.30		6.000	58.0	0.100	0.0011			1.20	19.000			
ARITH MEAN			0.30		4.417	52.9	0.056	0.0010			0.65	17.250			
GEOM MEAN					4.328	52.6	0.053				0.60	17.203			
MINIMUM			0.30		3.000	40.0	0.029	0.0010			0.30	14.000			
STD DEV (GEOM *)					0.900	5.3	0.021				0.27	1.288			
# SAMP IN STATISTICS			12		12	12	12	3			11	12			
% SAMP (EXCLUDED)								75							
*=INTERIM		TEST-NAME:	CCNAUR	CCNFUR	CDUT	CLIDUR	COD	COLAP	COND25	COUT	CRUT	CUUT			
			CYANIDE	CYANIDE											
			AVAIL	FREE	CADMIUM	CHLORIDE	CHEM. OX								
			UNF. REAC	UNF. REAC	UNF. TOT.	UNF. REAC	DEMAND	COLOUR	CONDUCT.	COBALT	CHROMIUM	COPPER			
SAMPLE			MG/L	MG/L	MG/L	MG/L	MG/L		25C	UNF. TOT.	UNF. TOT.	UNF. TOT.			
DATE	HOUR	SAMPLE	AS HCN	AS HCN	AS CD	AS CL-	AS O	APPARENT	UMHO/CM	MG/L	MG/L	MG/L			
YYMMDD	LMT	NUMBER						HZU	AT 25 C	AS CO	AS CR	AS CU			
830124	1700	10524	0.001<		0.0005<	2.200	18	83.000	126.0	0.0020<	0.0020<	0.0030			
830224	1346	10542	0.001<W	0.001<W	0.0010	2.900	40	82.000	127.0	0.0020<	0.0020<	0.0010			
830328	1846	10560	0.001<W	0.001<W	0.0010	4.000	37	84.000	137.0	0.0020<	0.0020<	0.0010			
830425	1645	10578	0.001<W	0.001<W	0.0010	8.000	31	92.000	136.0	0.0020<	0.0020<	0.0020			
830524	1440	10596	0.001<W	0.001<W	0.0005<	3.600	24	86.000	102.0	0.0020<	0.0050	0.0020			
830627	1410	10614	0.001<W	0.001<W	0.0005<	3.000	29	74.000	115.0	0.0020<	0.0020<	0.0020			
830725	1530	10632			0.0010	3.100	36	64.000	124.0	0.0020<	0.0030	0.0010			
830822	1520	10650	0.001<T	0.001<W	0.0005<	2.700	27	55.000	130.0	0.0020<	0.0070	0.0020			
830926	1435	10668	0.001		0.0005<	5.600	40	74.000	149.0	0.0020<	0.0020<	0.0020			
831024	1610	10686	0.001<W	0.001<W	0.0005<	3.200	28	76.000	127.0	0.0020<	0.0020<	0.0020			
831121	1500	10704	0.001<T	0.001<W	0.0005<	5.200	28	87.000	131.0	0.0020<	0.0020	0.0010			
831220	0955	10722	0.002<T	0.001<W	0.0005<	2.700	3.8	92.000	129.0	0.0020<	0.0020<	0.0020			

(C O N T D)

1983 WATER QUALITY DATA REGION 6

59

B.O.W./ SITE: CEDAR CREEK
 SAMPLE POINT: HWY 17
 STATION TYPE: RIVER

STATION ID: 01-0060-010-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: PIC RIVER

STORET CODE: 02
 001
 2280

LAT: 48 41 47.30 LONG: 085 52 51.34 U T M: 16 0582350.0 5394100.0 4 REGION: 06 DISTANCE: 3.200

*INTERIM TEST-NAME:		CCNAUR CYANIDE AVAIL	CCNFUR CYANIDE FREE	CDUT CADIUM UNF. TOT.	CLIDUR CHLORIDE UNF. REAC	COD CHEM. OX DEMAND	COLAP COLOUR APPARENT	COND25 CONDUCT. 25C	COUT COBALT UNF. TOT.	CRUT CHROMIUM UNF. TOT.	CUUT COPPER UNF. TOT.	
SAMPLE DATE YYMMDD	HOUR LMT	SAMPLE NUMBER	UNF. REAC MG/L AS HCN	UNF. REAC MG/L AS HCN	UNF. TOT. MG/L AS CD	UNF. REAC MG/L AS CL-	DEMAND MG/L AS O	COLOUR APPARENT HZU	CONDUCT. 25C UMHO/CM AT 25 C	COBALT UNF. TOT. MG/L AS CO	CHROMIUM UNF. TOT. MG/L AS CR	COPPER UNF. TOT. MG/L AS CU
MAXIMUM		0.002	0.001	0.0010	8.000	40	92.000	149.0		0.0070	0.0030	
ARITH MEAN		0.001<A	0.001<A	0.0010	3.850	28	79.083	127.7		0.0042	0.0017	
GEOM MEAN			0.001<A		3.594	25	78.292	127.3			0.0016	
MINIMUM		0.001	0.001	0.0010	2.200	3.8	55.000	102.0		0.0020	0.0010	
STD DEV (GEOM *)			0.000<A		1.656	10	11.123	11.5			0.0006	
# SAMP IN STATISTICS		10	9	4	12	12	12	12		4	12	
% SAMP (EXCLUDED)		9		66						66		

*INTERIM TEST-NAME:		DO DISOLVED OXYGEN	FCMF FECAL COLIFORM MF	FEUT IRON UNF. TOT.	FSMF FECAL STREPCUS MF	FWPH PH FIELD	FWSTRC STREAM COND.	FWTEMP WATER TEMP DEG. C	HARDT HARDNESS TOTAL AS CACO3	HGUT MERCURY UNF. TOT. UG/L AS HG	KKUR POTASSIM UNF. REAC MG/L AS K
SAMPLE DATE YYMMDD	HOUR LMT	SAMPLE NUMBER	MG/L AS O	CNT /100ML	MG/L AS FE	CNT /100ML					
830124	1700	10524	14.2	4<	0.0900	4<	6.9	1.0	58.000	0.050<	0.28
830224	1346	10542	10.3	4<	0.0760	4<	7.2	1.0	61.000	0.050<	0.23
830328	1846	10560	9.7	4<	0.1300	4<	7.0	1.0	65.000	0.050<	0.26
830425	1645	10578	9.9	4<	0.1600	4<	6.9	1.0	60.000	0.050<	0.34
830524	1440	10596	10.3	4<	0.1500	4<	7.0	9.0	46.000	0.050<	0.31
830627	1410	10614	8.0	4<	0.1500	12	7.7	17.0	57.000	0.050<	0.29
830725	1530	10632	5.9	8	0.1000	268	7.7	25.0	63.000	0.050<	0.29
830822	1520	10650	7.4	16	0.1300	24	7.6	21.5	68.000	0.050<	0.27
830926	1435	10668	9.6	4<	0.1100	4<	7.6	12.0	65.000	0.050<	0.17
831024	1610	10686	9.2	4	0.0890	4	7.2	6.0	63.000	0.050<	0.32
831121	1500	10704	11.7	4<	0.0840	4<	6.9	3.0	61.000	0.050<	0.35
831220	0955	10722	12.6	4<		4<	7.3	1.0	65.000	0.050<	0.35
MAXIMUM		14.2	16	0.1600	268	7.7		25.0	68.000		0.35
ARITH MEAN		9.9	9	0.1154	77	7.2		8.2	61.000		0.29
GEOM MEAN		9.7		0.1118		7.2		4.0	60.730		0.28
MINIMUM		5.9	4	0.0760	4	6.9		1.0	46.000		0.17
STD DEV (GEOM *)		2.3		0.0299		0.3		8.8	5.689		0.05
# SAMP IN STATISTICS		12	3	11	4	12		12	12		12
% SAMP (EXCLUDED)			75		66						

(CONT D)

1983 WATER QUALITY DATA REGION 6

60

B.O.W./ SITE: CEDAR CREEK
 SAMPLE POINT: HWY 17
 STATION TYPE: RIVER

STATION ID: 01-0060-010-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: PIC RIVER

STORET CODE: 02
 001
 2280

LAT: 48 41 47.30 LONG: 085 52 51.34 U T M: 16 0582350.0 5394100.0 4 REGION: 06 DISTANCE: 3.200

*=INTERIM		TEST-NAME:	MGUR	MNUT	NAUR	NIUT	NNHTFR NH3-N TOTAL	NNO2FR NO2-N	NNO3FR NO3-N	NNTKUR K'DAHL N TOTAL	PBUT	PH
SAMPLE DATE	HOUR	SAMPLE NUMBER	MAGNESIUM FIL.REAC MG/L AS MG	MANGANESE UNF.TOT. MG/L AS MN	SODIUM UNF.REAC MG/L AS NA	NICKEL UNF.TOT. MG/L AS NI	FIL.REAC MG/L AS N	FIL.REAC MG/L AS N	FIL.REAC MG/L AS N	UNF.REAC MG/L AS N	LEAD UNF.TOT. MG/L AS PB	PH
830124	1700	10524	4.200	0.007	1.600	0.002	0.010	0.003	0.080	0.410	0.003<	7.30
830224	1346	10542	4.400	0.014	2.100	0.002<	0.010	0.003	0.100	0.440	0.003<	7.20
830328	1846	10560	4.500	0.010	2.700	0.004	0.010<	0.005	0.140	0.460	0.003<	7.10
830425	1645	10578	4.200	0.015	4.900	0.002<	0.010<	0.004	0.290	0.420	0.003<	6.90
830524	1440	10596	3.600	0.011	2.400	0.002	0.020	0.005	0.040	0.400	0.003<	7.40
830627	1410	10614	4.100	0.019	2.100	0.002	0.030	0.004	0.010	0.500	0.003<	7.50
830725	1530	10632	4.500	0.024	2.400	0.004	0.040	0.003	0.010<	0.490	0.003<	7.40
830822	1520	10650	5.000	0.024	2.400	0.002<	0.020	0.003	0.010	0.450	0.005	7.40
830926	1435	10668	4.800	0.013	3.600	0.004	0.010	0.003	0.010<	0.500	0.003<	7.50
831024	1610	10686	4.700	0.009	2.300	0.002<	0.010<	0.003	0.040	0.470	0.003<	7.30
831121	1500	10704	4.600	0.010	3.700	0.002<	0.010<	0.001	0.140	0.530	0.003<	7.20
831220	0955	10722	4.900		2.100	0.002<	0.040	0.004	0.100	0.520	0.003<	7.20
MAXIMUM			5.000	0.024	4.900	0.004	0.040	0.005	0.290	0.530	0.005	7.50
ARITH MEAN			4.458	0.014	2.692	0.003	0.022	0.003	0.095	0.466	0.005	7.28
GEOM MEAN			4.442	0.013	2.570			0.003		0.464		7.28
MINIMUM			3.600	0.007	1.600	0.002	0.010	0.001	0.010	0.400	0.005	6.90
STD DEV (GEOM *)			0.392	0.006	0.923			0.001		0.043		0.17
# SAMP IN STATISTICS			12	11	12	6	8	12	10	12	1	12
% SAMP (EXCLUDED)						50	33		16		91	
*=INTERIM		TEST-NAME:	PP04FR	PPUT	PSAMF PSEUDOMN AERUG.	RSF	RSP	RST	SI03UR	SS04UR	TCHF COLIFORM TOTAL	TCHFBK COLIFORM TOTAL HF
SAMPLE DATE	HOUR	SAMPLE NUMBER	PO4 FIL.REAC MG/L AS P	PHOSPHOR UNF.TOT. MG/L AS P	MF CNT /100ML	RESIDUE FILTERED MG/L	RESIDUE PARTIC. MG/L	RESIDUE TOTAL MG/L	SILICATE UNF.REAC MG/L AS SI	SULPHATE UNF.REAC MG/L AS SO4	MF CNT /100ML	BCKGRD CNT /100ML
830124	1700	10524	0.001	0.010	1<	109.00	1.00	110.00	2.000	4.600	10<	30AID
830224	1346	10542	0.001<	0.007		99.000	1.00	100.00	2.200	2.500	10<	110
830328	1846	10560	0.002	0.010	1<	139.00	1.00	140.00	2.300	4.100	10AID	170
830425	1645	10578	0.001<	0.012	1<	128.000	2.00	130.00	2.500	5.500	10<	140
830524	1440	10596	0.001<	0.011	1<	93.000	2.00	95.00	1.700	6.000	40AID	510
830627	1410	10614	0.002	0.019		101.000	4.00	105.00	1.500	5.200	550C	3500
830725	1530	10632	0.003	0.016		106.00	4.00	110.00	1.200	4.200	10AID	6600
830822	1520	10650	0.003	0.019		126.00	4.00	130.00	1.400	4.300	200AID	4100
830926	1435	10668	0.002	0.015		138.00	2.00	140.00	2.000	4.900	70AID	910
831024	1610	10686	0.002	0.015		118.00	2.00	120.00	1.700	4.300	40AID	300
831121	1500	10704	0.003	0.013		109.00	1.00	110.00	1.900	6.100	180	710
831220	0955	10722	0.005	0.010		129.000	1.00	130.00		6.000	10<	20AID

(C O N T D)

1983 WATER QUALITY DATA REGION 6

61

B.O.W./ SITE: CEDAR CREEK
 SAMPLE POINT: HWY 17
 STATION TYPE: RIVER

STATION ID: 01-0060-010-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: PIC RIVER

STORET CODE: 02
 001
 2280

LAT: 48 41 47.30 LONG: 085 52 51.34 U T M: 16 0582350.0 5394100.0 4 REGION: 06 DISTANCE: 3.200

*INTERIM TEST-NAME:		PP04FR	PPUT	PSAMF PSEUDOMN AERUG.	RSF	RSP	RST	SIO3UR	SSO4UR	TCMF COLIFORM TOTAL	TCMFBK COLIFORM TOTAL MF
		PO4 FIL.REAC MG/L AS P	PHOSPHOR UNF.TOT. MG/L AS P	MF CNT /100ML	RESIDUE FILTERED MG/L	RESIDUE PARTIC. MG/L	RESIDUE TOTAL MG/L	SILICATE UNF.REAC MG/L AS SI	SULPHATE UNF.REAC MG/L AS SO4	MF CNT /100ML	BCKGRD CNT /100ML
MAXIMUM		0.005	0.019		139.00	4.00	140.00	2.500	6.100	550	6600
ARITH MEAN		0.003	0.013		116.25	2.08	118.33	1.855	4.808	137	1425
GEOM MEAN			0.013		115.29	1.78	117.41	1.814	4.688		396
MINIMUM		0.001	0.007		93.000	1.00	95.00	1.200	2.500	10	20
STD DEV (GEOM *)			0.004		15.58	1.24	15.42	0.398	1.041		6*
# SAMP IN STATISTICS		9	12		12	12	12	11	12	8	12
% SAMP (EXCLUDED)		25								33	

*INTERIM TEST-NAME:		TURB	ZNUT ZINC UNF.TOT. MG/L AS ZN
SAMPLE DATE HOUR YYMMDD LMT	SAMPLE NUMBER	TURB'ITY FTU	
830124 1700	10524	0.40	0.0010
830224 1346	10542	0.40	0.0010<
830328 1846	10560	0.30	0.0010<
830425 1645	10578	0.45	0.0040
830524 1440	10596	0.55	0.0020
830627 1410	10614	1.30	0.0010
830725 1530	10632	1.20	0.0010
830822 1520	10650	1.70	0.0010
830926 1435	10668	0.95	0.0010
831024 1610	10686	0.65	0.0020
831121 1500	10704	0.55	0.002
831220 0955	10722	0.45	0.0010
MAXIMUM		1.70	0.0040
ARITH MEAN		0.74	0.002
GEOM MEAN		0.64	
MINIMUM		0.30	0.0010
STD DEV (GEOM *)		0.44	
# SAMP IN STATISTICS		12	10
% SAMP (EXCLUDED)			16

1983 WATER QUALITY DATA REGION 6

62

B.O.W./ SITE: WABIKOBA CREEK
 SAMPLE POINT: HWY 17
 STATION TYPE: RIVER

STATION ID: 01-0060-011-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: PIC RIVER

STORET CODE: 02
 001
 2280

LAT: 52 18 45.82 LONG: 085 41 58.61 U T M: 16 0588650.0 5796400.0 4 REGION: 06 DISTANCE: 0.320

*INTERIM TEST-NAME:		FWSADP	FGPROJ	ACDT	ALKT	ALUT	ASUT	AS3UR	ASSUR	BOD5	CAUR
				ACIDITY	ALK	ALUMINUM	ARSENIC	ARSENITE	ARSENATE	TOT. DEM.	CALCIUM
SAMPLE DATE	YHMD LMT	SAMPLE NUMBER	DEPTH M	TOTAL MG/L AS CACO3	TOTAL MG/L AS CACO3	UNF. TOT. MG/L AS AL	UNF. TOT. MG/L AS AS	UNF. REAC MG/L AS AS	UNF. REAC MG/L AS AS	5 DAY MG/L AS O	UNF. REAC MG/L AS CA
830124	1725	10525	0.30	5.000	58.0	0.040	0.0010<			0.80	19.000
830223	1832	10543	0.30	5.000	60.0	0.070	0.0010<			0.30	18.000
830328	1900	10561	0.30	3.000	60.0	0.120	0.0010<			1.30	19.000
830425	1705	10579	0.30	4.000	57.0	0.060	0.0010<			0.30	19.000
830524	1455	10597	0.30	3.000	45.0	0.060	0.0010<			0.50	12.000
830627	1430	10615	0.30	5.000	60.0	0.110	0.0010			0.60	19.000
830725	1550	10633	0.30	3.000	61.0	0.076	0.0010			1.00	19.000
830822	1540	10651	0.30	6.000	70.0	0.050	0.0010<			0.80	23.000
830926	1505	10669	0.30	6.000	63.0	0.030	0.0010<			1.00	20.000
831024	1630	10687	0.30	4.000	58.0	0.036	0.0010<	0.001<	0.001<	0.80	18.000
831121	1515	10705	0.30	4.000	62.0	0.060	0.0010<			0.60	20.000
831220	0930	10723	0.30	6.000	69.0	0.030	0.0012				22.000
MAXIMUM		0.30		6.000	70.0	0.120	0.0012			1.30	23.000
ARITH MEAN		0.30		4.500	60.2	0.062	0.0011			0.73	19.000
GEOM MEAN				4.356	59.9	0.056				0.66	18.799
MINIMUM		0.30		3.000	45.0	0.030	0.0010			0.30	12.000
STD DEV (GEOM *)				1.168	6.3	0.029				0.31	2.663
# SAMP IN STATISTICS		12		12	12	12	3			11	12
% SAMP (EXCLUDED)							75				

*INTERIM TEST-NAME:		CCNAUR	CCNFUR	CDUT	CLIDUR	COD	COLAP	COND25	COUT	CRUT	CUUT
		CYANIDE	CYANIDE	CADMIUM	CHLORIDE	CHEM. OX	COLOUR	CONDUCT.	COBALT	CHROMIUM	COPPER
SAMPLE DATE	YHMD LMT	UNF. REAC MG/L AS HCN	UNF. REAC MG/L AS HCN	UNF. TOT. MG/L AS CD	UNF. REAC MG/L AS CL-	DEMAND MG/L AS O	APPARENT HZU	25C UMHO/CM AT 25 C	UNF. TOT. MG/L AS CO	UNF. TOT. MG/L AS CR	UNF. TOT. MG/L AS CU
830124	1725	0.001<		0.0005<	2.100	30	62.000	138.0	0.0020<	0.0020<	0.0040
830223	1832	0.001<W	0.001<W	0.0015	0.600	28	62.000	129.0	0.0020<	0.0020<	0.0030
830328	1900	0.001<W	0.001<W	0.0020	4.500	41	61.000	152.0	0.0020<	0.0030	0.0030
830425	1705	0.001<T	0.001<W	0.0010	6.500	23	65.000	157.0	0.0020<	0.0020<	0.0020
830524	1455	0.001<W	0.001<W	0.0005<	1.200	20	71.000	103.0	0.0020<	0.0080	0.0020
830627	1430	0.001<W	0.001<W	0.0005<	0.600	26	63.000	124.0	0.0020<	0.0020<	0.0020
830725	1550	0.001<W	0.001<W	0.0015	0.200	52	53.000	128.0	0.0020<	0.0020	0.0020
830822	1540	0.001<T	0.001<W	0.0005<	0.300	18	54.000	144.0	0.0020<	0.0020<	0.0020
830926	1505	0.001		0.0005<	0.900	42	102.000	135.0	0.0020<	0.0020	0.0010
831024	1630	0.001<W	0.001<W	0.0005<	0.600	23	72.000	125.0	0.0020<	0.0020<	0.0020
831121	1515	0.001<T	0.001<W	0.0005<	2.700	25	70.000	136.0	0.0020<	0.0020	0.0010
831220	0930	0.001<W	0.001<W	0.0005<	0.500	26	57.000	144.0	0.0020<	0.0060	0.0020

(C O N T D)

1983 WATER QUALITY DATA REGION 6

63

B.O.W./ SITE: WABIKOBA CREEK
 SAMPLE POINT: HWY 17
 STATION TYPE: RIVER

STATION ID: 01-0060-011-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: PIC RIVER

STORET CODE: 02
 001
 2280

LAT: 52 18 45.82 LONG: 085 41 58.61 U T M: 16 0588650.0 5796400.0 4 REGION: 06 DISTANCE: 0.320

*=INTERIM TEST-NAME:			CCNAUR CYANIDE AVAIL	CCNFUR CYANIDE FREE	CDUT	CLIDUR	COD	COLAP	COND25	COUT	CRUT	CUUT
SAMPLE DATE	HOUR	SAMPLE NUMBER	UNF.REAC MG/L AS HCN	UNF.REAC MG/L AS HCN	UNF.TOT. MG/L AS CD	CHLORIDE UNF.REAC MG/L AS CL-	CHEM. OX DEMAND MG/L AS O	COLOUR APPARENT HZU	CONDUCT. 25C UMHO/CM AT 25 C	COBALT UNF.TOT. MG/L AS CO	CHROMIUM UNF.TOT. MG/L AS CR	COPPER UNF.TOT. MG/L AS CU
		MAXIMUM	0.001	0.001	0.0020	6.500	52	102.000	157.0		0.0080	0.0040
		ARITH MEAN	0.001<A	0.001<A	0.0015	1.725	29	66.000	134.6		0.0038	0.0022
		GEOM MEAN		0.001<A		1.012	28	65.028	133.8			0.0020
		MINIMUM	0.001	0.001	0.0010	0.200	18	53.000	103.0		0.0020	0.0010
		STD DEV (GEOM *)		0.000<A		1.959	10	12.912	14.4			0.0008
		# SAMP IN STATISTICS	11	10	4	12	12	12	12		6	12
		% SAMP (EXCLUDED)	8		66						50	
*=INTERIM TEST-NAME:			DO	FCMF FECAL COLIFORM	FEUT	FSMF FECAL STREPCUS	FVPH	FWSTRC	FWTEMP	HARDT	HGUT	KKUR
SAMPLE DATE	HOUR	SAMPLE NUMBER	DISOLVED OXYGEN MG/L AS O	MF CNT /100ML	IRON UNF.TOT. MG/L AS FE	MF CNT /100ML	PH FIELD	STREAM COND.	WATER TEMP DEG.C	HARDNESS TOTAL MG/L AS CACO3	MERCURY UNF.TOT. UG/L AS HG	POTASSIM UNF.REAC MG/L AS K
830124	1725	10525	13.8	4<	0.2800	4<	7.05	4	0.5	63.000	0.050<	0.36
830223	1832	10543	11.3	4	0.0920	4	7.4	4	0.5	65.000	0.050<	0.37
830328	1900	10561	10.0	4<	0.3000	4<	6.8	4	1.0	67.000	0.050<	0.32
830425	1705	10579	11.1	4	0.1100	4<	7.1	3	3.5	67.000	0.050<	0.36
830524	1455	10597	10.2	12	0.1100	4<	7.1	3	8.0	21.000	0.050<	0.27
830627	1430	10615	6.2	8	0.1800	4	7.7	7	19.0	66.000	0.050<	0.28
830725	1550	10633	7.4	12	0.1800	248	7.6		23.0	67.000	0.050<	0.29
830822	1540	10651	4.3	4<	0.1900	8	7.5	7	22.0	78.000	0.050<	0.32
830926	1505	10669	5.9	4<	0.1800	4<	7.3		13.5	71.000	0.050<	0.21
831024	1630	10687	9.9	4	0.1100	4	6.8		5.5	65.000	0.050<	0.40
831121	1515	10705	11.8	4<	0.0970	4<	7.0		3.0	70.000	0.050<	0.32
831220	0930	10723	12.6	4<		4<	7.8	4	0.0	77.000	0.050<	0.47
		MAXIMUM	13.8	12	0.3000	248	7.8		23.0	78.000		0.47
		ARITH MEAN	9.5	7	0.1663	54	7.3		8.3	64.750		0.33
		GEOM MEAN	9.1		0.1534		7.3			62.136		0.32
		MINIMUM	4.3	4	0.0920	4	6.8		0.0	21.000		0.21
		STD DEV (GEOM *)	2.9		0.0719		0.3			14.542		0.07
		# SAMP IN STATISTICS	12	6	11	5	12		12	12		12
		% SAMP (EXCLUDED)		50		58						

(CONTD)

1983 WATER QUALITY DATA REGION 6

64

B.O.W./ SITE: WABIKOBA CREEK
 SAMPLE POINT: HWY 17
 STATION TYPE: RIVER

STATION ID: 01-0060-011-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: PIC RIVER

STORET CODE: 02
 001
 2280

LAT: 52 18 45.82 LONG: 085 41 58.61

U T M: 16 0588650.0 5796400.0 4

REGION: 06

DISTANCE: 0.320

*=INTERIM	TEST-NAME:	MGUR	MNUT	NAUR	NIUT	NNHTFR NH3-N TOTAL	NNO2FR NO2-N FIL.REAC	NNO3FR NO3-N FIL.REAC	NNTKUR K'DAHL N TOTAL	PBUT	PH
SAMPLE DATE HOUR YYMMDD LMT	SAMPLE NUMBER	MAGNESIUM FIL.REAC MG/L AS MG	MANGANESE UNF.TOT. MG/L AS MN	SODIUM UNF.REAC MG/L AS NA	NICKEL UNF.TOT. MG/L AS NI	FIL.REAC MG/L AS N	FIL.REAC MG/L AS N	FIL.REAC MG/L AS N	FIL.REAC MG/L AS N	LEAD UNF.TOT. MG/L AS PB	PH
830124 1725	10525	4.500	0.008	1.700	0.002<	0.020	0.002	0.100	0.430	0.003	7.40
830223 1832	10543	4.500	0.013	0.670	0.002<	0.060	0.002	0.120	0.560	0.003<	7.20
830328 1900	10561	4.600	0.015	3.500	0.007	0.010<	0.002	0.140	0.460	0.008	7.40
830425 1705	10579	4.700	0.012	4.800	0.002	0.010<	0.003	0.190	0.370	0.004	7.30
830524 1455	10597	3.700	0.009	1.100	0.002<	0.020	0.004	0.030	0.035	0.003	7.40
830627 1430	10615	4.500	0.024	0.970	0.002<	0.020	0.003	0.020	0.400	0.003<	7.40
830725 1550	10633	4.700	0.033	0.670	0.005	0.030	0.003	0.020	0.430	0.003	7.20
830822 1540	10651	5.200	0.027	0.810	0.002<	0.020	0.001	0.010<	0.440	0.006	7.30
830926 1505	10669	5.200	0.017	1.400	0.004	0.030	0.004	0.010<	0.540	0.004	7.20
831024 1630	10687	4.600	0.010	1.100	0.002<	0.010<	0.003	0.040	0.550	0.003<	7.40
831121 1515	10705	4.800	0.010	2.200	0.003	0.010<	0.001	0.090	0.440	0.003<	7.30
831220 0930	10723	5.300		0.79	0.002<	0.040	0.002	0.090	0.450	0.003	7.2
MAXIMUM		5.300	0.033	4.800	0.007	0.060	0.004	0.190	0.560	0.008	7.40
ARITH MEAN		4.692	0.016	1.64	0.004	0.030	0.002	0.084	0.425	0.004	7.3
GEOM MEAN		4.673	0.015	1.33			0.002		0.369		7.3
MINIMUM		3.700	0.008	0.670	0.002	0.020	0.001	0.020	0.035	0.003	7.20
STD DEV (GEOM *)		0.427	0.008	1.28			0.001		0.137		0.1
# SAMP IN STATISTICS		12	11	12	5	8	12	10	12	8	12
% SAMP (EXCLUDED)					58	33		16		33	
*=INTERIM	TEST-NAME:	PP04FR	PPUT	PSAMF PSEUDOMN AERUG. HF CNT /100ML	RSF RESIDUE FILTERED MG/L	RSP RESIDUE PARTIC. MG/L	RST RESIDUE TOTAL MG/L	SIO3UR SILICATE UNF.REAC MG/L AS SI	SS04UR SULPHATE UNF.REAC MG/L AS S04	TCMF COLIFORM TOTAL HF CNT /100ML	TCMFBK COLIFORM TOTAL HF BCKGRD CNT /100ML
SAMPLE DATE HOUR YYMMDD LMT	SAMPLE NUMBER	PO4 FIL.REAC MG/L AS P	PHOSPHOR UNF.TOT. MG/L AS P								
830124 1725	10525	0.001	0.009	1<	94.00	1.00	95.00	2.100	4.500	40AID	890
830223 1832	10543	0.001<	0.009		80.00	5.00	85.0	2.200	2.600	20C	4000
830328 1900	10561	0.001	0.017	1<	132.00	8.00	140.00	2.300	4.000	10<	180
830425 1705	10579	0.001<	0.009	1	127.00	3.00	130.00	2.400	5.300	10AID	200
830524 1455	10597	0.001	0.011	1<	118.00	2.00	120.00	1.600	4.900	28	550
830627 1430	10615	0.002	0.021		95.00	5.00	100.00	1.500	5.200	320C	3000
830725 1550	10633	0.004	0.013		108.00	2.00	110.00	1.400	4.000	400AID	7400
830822 1540	10651	0.003	0.015		118.00	2.00	120.00	2.000	3.700	200AID	4900
830926 1505	10669	0.002	0.015		139.00	1.00	140.00	2.500	4.000	70AID	660
831024 1630	10687	0.002	0.016		139.00	1.00	140.00	1.900	4.000	70AID	600
831121 1515	10705	0.003	0.011		119.00	1.00	120.00	2.000	5.100	150	610
831220 0930	10723	0.005	0.008		129.00	1.00	130.00		5.800	10<	40AID

(CONT'D)

1983 WATER QUALITY DATA REGION 6

65

B.O.W./ SITE: WABIKOBA CREEK
 SAMPLE POINT: HWY 17
 STATION TYPE: RIVER

STATION ID: 01-0060-011-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: PIC RIVER

STORET CODE: 02
 001
 2280

LAT: 52 18 45.82 LONG: 085 41 58.61 U T M: 16 0588650.0 5796400.0 4 REGION: 06 DISTANCE: 0.320

*=INTERIM TEST-NAME:		PP04FR	PPUT	PSAMF PSEUDOMN AERUG.	RSF	RSP	RST	SI03UR	SS04UR	TCMF COLIFORM TOTAL	TCMFBK COLIFORM TOTAL MF
		P04 FIL.REAC MG/L AS P	PHOSPHOR UNF.TOT. MG/L AS P	MF CNT /100ML	RESIDUE FILTERED MG/L	RESIDUE PARTIC. MG/L	RESIDUE TOTAL MG/L	SILICATE UNF.REAC MG/L AS SI	SULPHATE UNF.REAC MG/L AS SO4	MF CNT /100ML	MF BCKGRD CNT /100ML
SAMPLE DATE YYMMDD	HOUR LMT	SAMPLE NUMBER									

		MAXIMUM	0.005	0.021	1	139.00	8.00	140.00	2.500	5.800	400	7400
		ARITH MEAN	0.002	0.013	1	116.50	2.67	119.2	1.991	4.425	131	1919
		GEOM MEAN		0.012		114.98	2.03	117.8	1.959	4.337		805
		MINIMUM	0.001	0.008	1	80.00	1.00	85.0	1.400	2.600	10	40
		STD DEV (GEOM *)		0.004		18.84	2.23	18.4	0.365	0.880		5*
		# SAMP IN STATISTICS	10	12	1	12	12	12	11	12	10	12
		% SAMP (EXCLUDED)	16		75						16	

*=INTERIM TEST-NAME:		TURB	ZNUT ZINC UNF.TOT. MG/L AS ZN
SAMPLE DATE YYMMDD	HOUR LMT	SAMPLE NUMBER	TURB'ITY FTU

830124	1725	10525	0.50	0.0040
830223	1832	10543	0.50	0.0060
830328	1900	10561	1.30	0.0080
830425	1705	10579	0.45	0.0020
830524	1455	10597	0.60	0.0010
830627	1430	10615	1.70	0.0015
830725	1550	10633	1.30	0.0020
830822	1540	10651	0.95	0.0050
830926	1505	10669	0.85	0.0010
831024	1630	10687	0.75	0.0010
831121	1515	10705	0.65	0.001
831220	0930	10723	0.65	0.0030

		MAXIMUM	1.70	0.0080
		ARITH MEAN	0.85	0.003
		GEOM MEAN	0.78	0.002
		MINIMUM	0.45	0.0010
		STD DEV (GEOM *)	0.39	0.002
		# SAMP IN STATISTICS	12	12
		% SAMP (EXCLUDED)		

1983 WATER QUALITY DATA REGION 6

66

B.O.W./ SITE: LITTLE PIC RIVER
 SAMPLE POINT: AT HIGHWAY 17
 STATION TYPE: RIVER FLOW GAUGE FED 02BA003

STATION ID: 01-0067-001-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: LITTLE PIC RIVER

STORET CODE: 02
 001
 2460

LAT: 48 48 04.22 LONG: 086 37 53.94 U T M: 16 0527050.0 5405200.0 4 REGION: 06 DISTANCE: 1.448

*=-INTERIM		TEST-NAME:	FWSADP	FGPROJ	ALK	ALUT	ASUT	CDUT	COND25	CRUT	CUUT	DO
DATE	HOUR	SAMPLE	SAMPLE	PROJECT	ALK	ALUMINUM	ARSENIC	CADMIUM	CONDUCT.	CHROMIUM	COPPER	DISOLVED
YYMMDD	LMT	NUMBER	DEPTH	SUB-PROJ	TOTAL	UNF.TOT.	UNF.TOT.	UNF.TOT.	25C	UNF.TOT.	UNF.TOT.	OXYGEN
			M	CODE	MG/L	MG/L	MG/L	MG/L	UMHO/CM	MG/L	MG/L	MG/L
					AS CACO3	AS AL	AS AS	AS CD	AT 25 C	AS CR	AS CU	AS O
830105	1330	10505	0.30	0101	90.0		0.0010	0.0014	207.0	0.0180	0.0100	12.8
830124	1505	10520	0.30	0101	96.0		0.0010	0.0005<	215.0	0.0080	0.0070	14.4
830223	1517	10538	0.30	0101	97.0		0.0020	0.0020	201.0	0.0110	0.0100	13.5
830328	1606	10556	0.30	0101	97.0		0.0010<	0.0005<	206.0	0.0020<	0.0090	10.6
830425	1415	10574	0.30	0101	80.0		0.0010<	0.0010	176.0	0.0020	0.0030	13.5
830504	1330	40202	0.30	0103	59.0			0.0005<	128.0		0.0070	
830505	1130	40205	0.30	0103	55.0			0.0005	124.0		0.0040	
830507	1315	40208	0.30	0103	57.0			0.0005<	132.0		0.0040	
830509	1145	40211	0.30	0103	59.0			0.0005<	134.0		0.0030	
830510		48216	0.30	0103								
	1400	40214	0.30	0103	62.0			0.0005<	136.0		0.0040	
830513	1215	40219	0.30	0103	61.0			0.0007	129.0		0.0100	
830515	1515	40222	0.30	0103	56.0			0.0005<	124.0		0.0050	
830517	1245	40225	0.30	0103	58.0			0.0007	127.0		0.0030	
830519	1130	40228	0.30	0103	60.0			0.0005<	135.0		0.0060	
830521	1200	40231	0.30	0103	65.0			0.0005<	141.0		0.0040	
830525	0830	10592	0.30	0101	63.0		0.0010	0.0005<	135.0	0.0100	0.0070	12.2
	1220	40237	0.30	0103	64.0			0.0005<	136.0		0.0040	
830527	1230	40240	0.30	0103	60.0			0.0005<	132.0		0.0030	
830529	1530	40243	0.30	0103	62.0			0.0005<	134.0		0.0030	
830531	1440	40246	0.30	0103	66.0			0.0005<	139.0		0.0050	
830603	0850	40249	0.30	0103	69.0			0.0005<	144.0		0.0030	
830605	1445	40252	0.30	0103	77.0			0.0005<	148.0		0.0030	
830607	1130	40255	0.30	0103	71.0			0.0005<	151.0		0.0030	
830609	0945	40258	0.30	0103	72.0			0.0005<	158.0		0.0020	
830619	1515	40261	0.30	0103	89.0			0.0005<	173.0		0.0020	
830627		10610	0.30	0101	87.0		0.0010	0.0005<	174.0	0.0020<	0.0020	10.2
830703	1320	40264	0.30	0103	88.0			0.0005	173.0		0.0030	
830717	1500	40267	0.30	0103	80.0			0.0005<	169.0		0.0030	
830726	0915	10628	0.30	0101	91.0		0.0019	0.0020	185.0	0.0030	0.0030	8.3
830801	0900	40270	0.30	0103	96.0			0.0005	194.0		0.0030	
830814	1345	40273	0.30	0103	104.0			0.0015	210.0		0.0050	
830823	0910	10646	0.30	0101	109.0	0.001<	0.0010<	0.0005<	216.0	0.0060		7.8
830828	1345	40276	0.30	0103	112.0			0.0005<	217.0		0.0020	
830917	1420	40279	0.30	0103	110.0			0.0005<	219.0		0.0020	
830927	1410	40282	0.30	0103	104.0			0.0005<	212.0		0.0020	
831010	1630	40285	0.30	0103	77.0			0.0005<	172.0		0.0030	
831017	1500	40288	0.30	0103	68.0			0.0005<	132.0		0.0070	
831019	1230	40291	0.30	0103	61.0			0.0005<	129.0		0.0050	
831023	1500	40294	0.30	0103	65.0			0.0005<	139.0		0.0040	
831024	1445	10682	0.30	0101	67.0		0.0010	0.0005<	141.0	0.0020	0.0040	12.6

(CONT'D)

B.O.N./ SITE: LITTLE PIC RIVER
 SAMPLE POINT: AT HIGHWAY 17
 STATION TYPE: RIVER FLOW GAUGE FED 02BA003

STATION ID: 01-0067-001-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: LITTLE PIC RIVER

STORET CODE: 02
 001
 2460

LAT: 48 48 04.22 LONG: 086 37 53.94 U T M: 16 0527050.0 5405200.0 4 REGION: 06 DISTANCE: 1.448

*INTERIM TEST-NAME:		FWSADP	FGPROJ	ALKT	ALUT	ASUT	CDUT	COND25	CRUT	CUUT	DO
				ALK	ALUMINUM	ARSENIC	CADMIUM	CONDUCT.	CHROMIUM	COPPER	DISOLVED
SAMPLE DATE	YEAR	SAMPLE	DEPTH	TOTAL	UNF. TOT.	UNF. TOT.	UNF. TOT.	25C	UNF. TOT.	UNF. TOT.	OXYGEN
YYMMDD	LMT	NUMBER	M	MG/L	MG/L	MG/L	MG/L	UMHO/CM	MG/L	MG/L	MG/L
				AS CAC03	AS AL	AS AS	AS CD	AT 25 C	AS CR	AS CU	AS O
831030	1500	40297	0.30	73.0			0.0005<	148.0		0.0040	
831122	1120	10700	0.30	81.0		0.0010<	0.0005<	165.0	0.0090	0.0030	13.6
831220	1220	10718	0.30	95.0		0.0011	0.0005	201.0	0.0070	0.0040	14.2
MAXIMUM		0.30		112.0		0.0020	0.0020	219.0	0.0180	0.0100	14.4
ARITH MEAN		0.30		77.0		0.0012	0.0010	161.9	0.0076	0.0044	12.0
GEOM MEAN				75.3				158.9		0.0039	11.8
MINIMUM		0.30		55.0		0.0010	0.0005	124.0	0.0020	0.0020	7.8
STD DEV (GEOM *)				17.2				32.2		0.0023	2.2
# SAMP IN STATISTICS		44		43		8	11	43	10	42	12
% SAMP (EXCLUDED)						33	74		16		

*INTERIM TEST-NAME:		FWFLOW	FMPH	FWSTRC	FWTEMP	HGUT	NN03FR	PBUT	PH	PP04FR	PPUT
		STREAM				MERCURY	N03-N	LEAD		P04	PHOSPHOR
SAMPLE DATE	YEAR	FLOW	PH	STREAM	WATER	UNF. TOT.	FIL. REAC	UNF. TOT.		FIL. REAC	UNF. TOT.
YYMMDD	LMT	M3	FIELD	COND.	TEMP	UG/L	MG/L	MG/L	PH	MG/L	MG/L
		/S			DEG.C	AS HG	AS N	AS PB		AS P	AS P
830105	1330	10505	7.3	4	1.0	0.050<		0.006	7.90	0.007	0.250
830124	1505	10520	7.3	4	0.5	0.050<		0.003 <	7.80	0.004	0.160
830223	1517	10538	7.2	4	0.5	0.050<		0.005	7.70	0.006	0.400
830328	1606	10556	7.2	4	0.5	0.050<		0.004	7.70	0.001	0.037
830425	1415	10574	7.3	4	1.0	0.050<		0.003 <	7.80	0.007	0.028
830504	1330	40202						0.003 <	7.90		0.240
830505	1130	40205				0.050<	0.120	0.003 <	7.90	0.013	0.140
830507	1315	40208						0.003 <	7.20		0.098
830509	1145	40211				0.050<	0.110	0.003 <	7.80	0.011	0.076
830510		48216							7.80		
	1400	40214				0.050<	0.100	0.003 <	7.60	0.009	0.072
830513	1215	40219					0.100	0.004	7.90	0.019	0.300
830515	1515	40222				0.050<	0.100	0.005	7.90	0.025	0.180
830517	1245	40225					0.100	0.005	7.90	0.010	0.100
830519	1130	40228				0.050<	0.090	0.009	7.90	0.009	0.073
830521	1200	40231					0.080	0.004	7.80	0.010	0.058
830525	0830	10592	7.7	3	5.0	0.050<		0.003 <	7.90	0.019	0.120
	1220	40237					0.090	0.003 <	7.90	0.018	0.150
830527	1230	40240				0.050<	0.070	0.003 <	7.80	0.010	0.070
830529	1530	40243					0.060	0.003	7.90	0.008	0.072
830531	1440	40246				0.050<	0.060	0.003 <	7.90	0.013	0.095
830603	0850	40249					0.050	0.003 <	7.80	0.008	0.058
830605	1445	40252				0.050<	0.040	0.003 <	7.80	0.008	0.043

(C O N T D)

1983 WATER QUALITY DATA REGION 6

68

B.O.W./ SITE: LITTLE PIC RIVER
 SAMPLE POINT: AT HIGHWAY 17
 STATION TYPE: RIVER FLOW GAUGE FED 02BA003

STATION ID: 01-0067-001-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: LITTLE PIC RIVER

STORET CODE: 02
 001
 2460

LAT: 48 48 04.22		LONG: 086 37 53.94		U T M: 16 0527050.0 5405200.0 4		REGION: 06		DISTANCE: 1.448			
*=INTERIM TEST-NAME:		FWFLOW	FWPH	FWSTRC	FWTEMP	HGUT	NN03FR	PBUT	PH	PP04FR	PPUT
		STREAM				MERCURY	N03-N	LEAD		P04	PHOSPHOR
SAMPLE	DATE	FLOW	PH	STREAM	WATER	UNF.TOT.	FIL.REAC	UNF.TOT.		FIL.REAC	UNF.TOT.
YYMMDD	HOUR	M3	FIELD	COND.	TEMP	UG/L	MG/L	MG/L	PH	MG/L	MG/L
	LMT	/S			DEG.C	AS HG	AS N	AS PB		AS P	AS P
830607	1130	40255 22.400					0.040	0.003 <	7.90	0.007	0.039
830609	0945	40258 20.000				0.050<	0.040	0.003 <	7.80	0.005	0.027
830619	1515	40261 14.200					0.020	0.003 <	7.90	0.006	0.026
830627		10610 10.700	8.3		16.2	0.050<		0.0030<	8.00	0.003	0.018
830703	1320	40264 11.700				0.050<	0.020	0.003 <	8.00	0.004	0.026
830717	1500	40267 11.300					0.010<	0.032	7.80	0.003	0.017
830726	0915	10628 6.490	7.9		20.0	0.050<		0.005	8.00		0.013
830801	0900	40270 5.080				0.050<	0.010<	0.009	8.10	0.006	0.015
830814	1345	40273 3.490					0.010<	0.005	8.10	0.003	0.016
830823	0910	10646 3.020	8.1		18.5	0.050<		0.009	8.00	0.003	0.012
830828	1345	40276 3.060				0.050<	0.010<	0.003	8.10	0.003	0.028
830917	1420	40279 5.840					0.010<	0.003 <	8.10	0.003	0.019
830927	1410	40282 4.040				0.050<	0.010<	0.003 <	8.10	0.004	0.014
831010	1630	40285 10.300					0.010<	0.003 <	7.90	0.004	0.026
831017	1500	40288 96.300					0.070	0.003	7.70	0.027	0.150
831019	1230	40291 56.100					0.050	0.003 <	7.80	0.012	0.063
831023	1500	40294 33.500					0.050	0.003	7.60	0.008	0.044
831024	1445	10682 29.800	6.80	9	5.5	0.050<		0.003 <	7.80	0.006	0.031
831030	1500	40297 20.600				0.050<	0.050	0.005	7.70	0.005	0.030
831122	1120	10700 25.300	7.0		1.0	0.050<		0.003 <	7.70	0.012	0.058
831220	1220	10718 6.850	7.6	4	1.0	0.050<		0.003 <	7.70	0.006	0.053
MAXIMUM		96.300	8.3		20.0		0.120	0.032	8.10	0.027	0.400
ARITH MEAN		31.094	7.5		5.9		0.069	0.007	7.85	0.009	0.082
GEOM MEAN		20.340	7.5		2.3				7.85	0.007	0.054
MINIMUM		3.020	6.80		0.5		0.020	0.003	7.20	0.001	0.012
STD DEV (GEOM *)		25.210	0.5		7.7				0.16	0.006	0.085
# SAMP IN STATISTICS		44	12		12		22	18	44	40	43
% SAMP (EXCLUDED)							24	58			

(CONTD)

1983 WATER QUALITY DATA REGION 6

69

B.O.W./ SITE: LITTLE PIC RIVER
 SAMPLE POINT: AT HIGHWAY 17
 STATION TYPE: RIVER FLOW GAUGE FED 02BA003

STATION ID: 01-0067-001-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: LITTLE PIC RIVER

STORET CODE: 02
 001
 2460

LAT: 48 48 04.22 LONG: 086 37 53.94 U T M: 16 0527050.0 5405200.0 4 REGION: 06 DISTANCE: 1.448

*=INTERIM	TEST-NAME:	P1ALDR	P1BHCA	P1BHCB	P1BHCG	P1CHLA	P1CHLG	P1DIEL	P1DMDT	P1ENDR	P1ENDS	
SAMPLE DATE YYMMDD	HOURL LMT	SAMPLE NUMBER	ALDRIN NG/L	BHC ALPHA NG/L	BHC BETA NG/L	BHC GAMMA NG/L	CHLRDANE ALPHA NG/L	CHLRDANE GAMMA NG/L	DIELDRIN NG/L	DMDT MTHXYLLR NG/L	ENDRIN NG/L	ENDOSULP SULPHATE NG/L
830510		48216	1<W	1<W	1<W	1<W	2<W	2<W	2<W	5<W	4<W	4<W
	1400	40214	1<W	1<W	1<W	1<W	2<W	2<W	2<W	5<W	4<W	4<W
		MAXIMUM	1	1	1	1	2	2	2	5	4	4
		ARITH MEAN	1<A	1<A	1<A	1<A	2<A	2<A	2<A	5<A	4<A	4<A
		GEOM MEAN	1<A	1<A	1<A	1<A	2<A	2<A	2<A	5<A	4<A	4<A
		MINIMUM	1	1	1	1	2	2	2	5	4	4
		STD DEV (GEOM *)	0<A	0<A	0<A	0<A	0<A	0<A	0<A	0<A	0<A	0<A
		# SAMP IN STATISTICS	2	2	2	2	2	2	2	2	2	2
		% SAMP (EXCLUDED)										

*=INTERIM	TEST-NAME:	P1END1	P1END2	P1HEPE HEPTA CHLOR EPOXIDE NG/L	P1HEPT HEPACHOR NG/L	P1MIRX MIREX NG/L	P1OCHL OXCHLANE NG/L	P1OPDT OP-DDT NG/L	P1PCBT PCB TOTAL NG/L	P1PPDD PP-DDD NG/L	P1PPDE PP-DDE NG/L
SAMPLE DATE YYMMDD	HOURL LMT	SAMPLE NUMBER	ENDOSULP I NG/L	ENDOSULP II NG/L							
830105	1330	10505							20<W		
830124	1505	10520							20<W		
830223	1517	10538							20<W		
830328	1606	10556							20<W		
830425	1415	10574							20<W		
830510		48216	2<W	4<W	1<W	1<W	5<W	2<W	5<W	20<W	5<W 1<W
	1400	40214	2<W	4<W	1<W	1<W	5<W	2<W	5<W	20<W	5<W 1<W
830525	0830	10592							20<W		
830627		10610							20<W		
830726	0915	10628							20<W		
830823	0910	10646							20<W		
831024	1445	10682							20<W		
831122	1120	10700							20<W		
		MAXIMUM	2	4	1	1	5	2	5	20	5 1
		ARITH MEAN	2<A	4<A	1<A	1<A	5<A	2<A	5<A	20<A	5<A 1<A
		GEOM MEAN	2<A	4<A	1<A	1<A	5<A	2<A	5<A	20<A	5<A 1<A
		MINIMUM	2	4	1	1	5	2	5	20	5 1
		STD DEV (GEOM *)	0<A	0<A	0<A	0<A	0<A	0<A	0<A	0<A	0<A 0<A
		# SAMP IN STATISTICS	2	2	2	2	2	2	13	2	2
		% SAMP (EXCLUDED)									

(C O N T D)

1983 WATER QUALITY DATA REGION 6

70

B.O.W./ SITE: LITTLE PIC RIVER
 SAMPLE POINT: AT HIGHWAY 17
 STATION TYPE: RIVER FLOW GAUGE FED 02BA003

STATION ID: 01-0067-001-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: LITTLE PIC RIVER

STORET CODE: 02
 001
 2460

LAT: 48 48 04.22 LONG: 086 37 53.94 U T M: 16 0527050.0 5405200.0 4 REGION: 06 DISTANCE: 1.448

*=INTERIM	TEST-NAME:	P1PPDT	P2AMET	P2ATRA	P2BLAD	P2PROM	P2PROB	P2PROY	P2SENC	P2SIM	RSF	
SAMPLE DATE YYMMDD	HOUR LMT	SAMPLE NUMBER	PP-DDT NG/L	AMETRYNE NG/L	ATRAZINE NG/L	BLADEX NG/L	PROMETON NG/L	PRPAZINE NG/L	PRMTRYNE NG/L	SENCOR NG/L	SIMAZINE NG/L	RESIDUE FILTERED HG/L
830105	1330	10505										150.00
830124	1505	10520										160.00
830223	1517	10538										160.00
830328	1606	10556										145.00
830425	1415	10574										145.00
830510		48216	5<W	50<W	50<W	100<W	50<W	50<W	50<W	100<W	50<W	
	1400	40214	5<W	50<W	50<W	100<W	50<W	50<W	50<W	100<W	50<W	
830525	0830	10592										150.00
830627		10610										120.00
830726	0915	10628										154.00
830823	0910	10646										146.00
831024	1445	10682										145.00
831122	1120	10700										175.00
831220	1220	10718										185.00
		MAXIMUM	5	50	50	100	50	50	50	100	50	185.00
		ARITH MEAN	5<A	50<A	50<A	100<A	50<A	50<A	50<A	100<A	50<A	152.92
		GEOM MEAN	5<A	50<A	50<A	100<A	50<A	50<A	50<A	100<A	50<A	152.11
		MINIMUM	5	50	50	100	50	50	50	100	50	120.00
		STD DEV (GEOM *)	0<A	0<A	0<A	0<A	0<A	0<A	0<A	0<A	0<A	16.39
		# SAMP IN STATISTICS	2	2	2	2	2	2	2	2	2	12
		% SAMP (EXCLUDED)										

*=INTERIM	TEST-NAME:	RSP	X2HCB	ZNUT ZINC
SAMPLE DATE YYMMDD	HOUR LMT	SAMPLE NUMBER	RESIDUE PARTIC. HG/L	UNF. TOT. HG/L AS ZN
830105	1330	10505	510.00	0.0260
830124	1505	10520	260.00	0.0190
830223	1517	10538	580.00	0.0430
830328	1606	10556	35.00	0.0220
830425	1415	10574	25.00	0.0050
830504	1330	40202	360.00	
830505	1130	40205	210.00	
830507	1315	40208	130.00	
830509	1145	40211	95.00	
830510		48216		
	1400	40214	90.00	
830513	1215	40219	510.00	

(CONTD)

1983 WATER QUALITY DATA REGION 6

71

B.O.W./ SITE: LITTLE PIC RIVER

SAMPLE POINT: AT HIGHWAY 17

STATION TYPE: RIVER FLOW GAUGE FED 02BA003

STATION ID: 01-0067-001-02

MAJOR BASIN: GREAT LAKES

MINOR BASIN: LAKE SUPERIOR

TERM STREAM: LITTLE PIC RIVER

STORET CODE: 02

001

2460

LAT: 48 48 04.22 LONG: 086 37 53.94

U T M: 16 0527050.0 5405200.0 4

REGION: 06

DISTANCE: 1.448

*INTERIM TEST-NAME:		RSP	X2HCB	ZNUT
SAMPLE DATE	HOUR	SAMPLE	RESIDUE	ZINC
YYMMDD	LMT	NUMBER	PARTIC.	UNF.TOT.
			MG/L	MG/L
			HCB	AS ZN
			NG/L	
830515	1515	40222	240.00	
830517	1245	40225	110.00	
830519	1130	40228	90.00	
830521	1200	40231	80.00	
830525	0830	10592	210.00	0.0100
	1220	40237	200.00	
830527	1230	40240	110.00	
830529	1530	40243	90.00	
830531	1440	40246	120.00	
830603	0850	40249	70.00	
830605	1445	40252	50.00	
830607	1130	40255	45.00	
830609	0945	40258	30.00	
830619	1515	40261	20.00	
830627		10610	10.00	0.0010<
830703	1320	40264	30.00	
830717	1500	40267	15.00	
830726	0915	10628	6.00	0.0020
830801	0900	40270	8.00	
830814	1345	40273	10.00	
830823	0910	10646	4.00	0.0040
830828	1345	40276	3.00	
830917	1420	40279	7.00	
830927	1410	40282	4.00	
831010	1630	40285	20.00	
831017	1500	40288	190.00	
831019	1230	40291	80.00	
831023	1500	40294	35.00	
831024	1445	10682	25.00	0.0030
831030	1500	40297	25.00	
831122	1120	10700	55.00	0.005
831220	1220	10718	65.00	0.0200
MAXIMUM		580.00	1	0.0430
ARITH MEAN		113.07	1<A	0.014
GEOM MEAN		51.61	1<A	
MINIMUM		3.00	1	0.0020
STD DEV (GEOM *)		142.41	0<A	
# SAMP IN STATISTICS		43	2	11
% SAMP (EXCLUDED)				8

STORET CODE: 02
001
2490

*INTERIM		TEST-NAME:	COUT	CRUT	CUUT	DO	FCMF	FEUT	FVPH	FWSTRC	FWTEHP	HARDT
			COBALT	CHROMIUM	COPPER	DISOLVED	FECAL	IRON				HARDNESS
SAMPLE			UNF.TOT.	UNF.TOT.	UNF.TOT.	OXYGEN	COLIFORM	UNF.TOT.			WATER	TOTAL
DATE	HR	SAMPLE	MG/L	MG/L	MG/L	MG/L	MF	MG/L		PH	TEMP	MG/L
YYMMDD	LMT	NUMBER	AS CO	AS CR	AS CU	AS O	CNT	AS FE		FIELD	COND.	AS CAC03
							/100ML					
830105	1150	10504	0.0020<	0.0020<	0.0010	12.8	4<	0.3700	7.2	4	1.0	38.000
830124	1440	10519	0.0020<	0.0020<	0.0020	12.6	4<	0.3900	6.9	4	3.0	36.000
830224	1727	10537	0.0020<	0.0020<	0.0010	13.2	4<	0.3900	7.4	4	1.0	49.000
830425	1345	10573	0.0020<	0.0040	0.0010	14.0	4<	0.5000	6.9	3	1.0	31.000
830525	0845	10591	0.0020<	0.0080	0.0010	12.1	4<	0.3700	6.9	3	6.5	24.000
830628	0905	10609	0.0020<	0.0020	0.0030	10.2	4<	0.1900	7.1		11.5	41.000
830726	0930	10627	0.0020<	0.0020<	0.0060	9.5	4<	0.2600	7.7		17.5	58.000
830823	0925	10645	0.0020<	0.0030	0.0030	6.8	8	0.0300	7.6		15.5	72.000
830926	1315	10663	0.0020<	0.0020<	0.0010	7.7	4	0.2200	7.5		13.5	59.000
831024	1425	10681	0.0020<	0.0030	0.0030	13.1	4	0.0230	7.2		5.0	30.000
831122	1135	10699	0.0020<	0.0030	0.0010	14.2	8	0.4300	6.6		1.0	26.000
831219	1345	10717	0.0020<	0.0020	0.0020	14.2	4<	0.4300	7.2	4	1.0	38.000

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1983 WATER QUALITY DATA REGION 6

73

B.O.W./ SITE: DEAD HORSE CREEK
 SAMPLE POINT: AT HIGHWAY NO.17
 STATION TYPE: RIVER

STATION ID: 01-0068-001-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: DEAD HORSE CREEK

STORET CODE: 02
 001
 2490

LAT: 48 49 06.34 LONG: 086 41 12.09 U T M: 16 0523000.0 5407100.0 4 REGION: 06 DISTANCE: 2.253

*INTERIM TEST-NAME:		COBT	CRUT	CUUT	DO	FCMF FECAL COLIFORM	FEUT	FWPH	FWSTRC	FWTEMP	HARDT
		COBALT UNF.TOT. MG/L AS CO	CHROMIUM UNF.TOT. MG/L AS CR	COPPER UNF.TOT. MG/L AS CU	DISOLVED OXYGEN MG/L AS O	IRON UNF.TOT. MG/L AS FE		PH FIELD	STREAM COND.	WATER TEMP DEG.C	HARDNESS TOTAL MG/L AS CAC03
MAXIMUM			0.0080	0.0060	14.2	8	0.5000	7.7		17.5	72.000
ARITH MEAN			0.0036	0.0021	11.7	6	0.3002	7.2		6.5	41.833
GEOM MEAN				0.0017	11.4		0.2221	7.2		3.6	39.614
MINIMUM			0.0020	0.0010	6.8	4	0.0230	6.6		1.0	24.000
STD DEV (GEOM *)				0.0015	2.5		0.1565	0.3		6.3	14.795
# SAMP IN STATISTICS			7	12	12	4	12	12		12	12
% SAMP (EXCLUDED)			41			66					

*INTERIM TEST-NAME:		MNUT	NIUT	NNHTFR NH3-N TOTAL	NN02FR NO2-N FIL.REAC	NN03FR NO3-N FIL.REAC	NNTKUR K'DAHL N TOTAL	PBUT	PH	PP04FR P04 FIL.REAC	PPUT PHOSPHOR UNF.TOT. MG/L AS P	
		MANGANESE UNF.TOT. MG/L AS MN	NICKEL UNF.TOT. MG/L AS NI	FIL.REAC MG/L AS N	FIL.REAC MG/L AS N	FIL.REAC MG/L AS N	UNF.REAC MG/L AS N	LEAD UNF.TOT. MG/L AS PB	PH	AS P	AS P	
830105	1150	10504	0.016	0.002<	0.040	0.004	0.160	0.390	0.003<	7.60	0.002	0.013
830124	1440	10519	0.014	0.002<	0.040	0.004	0.200	0.420	0.003<	7.40	0.002	0.014
830224	1727	10537	0.015	0.002<	0.080	0.004	0.220	0.390	0.003<	7.40	0.004	0.008
830425	1345	10573	0.033	0.002	0.050	0.005	0.300	0.330	0.003	7.10	0.002	0.019
830525	0845	10591	0.013	0.002<	0.010	0.006	0.070	0.330	0.003<	7.00	0.002	0.013
830628	0905	10609	0.014	0.002<	0.010	0.004	0.040	0.330	0.003<	7.50	0.001	0.014
830726	0930	10627	0.020	0.003	0.020	0.003	0.040	0.380	0.011	7.50	0.004	0.009
830823	0925	10645	0.150	0.005	0.010	0.003	0.040	0.300	0.006	7.50	0.001	0.007
830926	1315	10663	0.018	0.005	0.010<	0.002	0.030	0.390	0.003<	7.50	0.003	0.009
831024	1425	10681	0.370	0.002<	0.010<	0.006	0.090	0.450	0.003<	6.90	0.003	0.011
831122	1135	10699	0.026	0.002<	0.020	0.004	0.230	0.520	0.003<	6.50	0.004	0.020
831219	1345	10717	0.030	0.003	0.040	0.004	0.200	0.610	0.003<	6.90	0.004	0.016
MAXIMUM		0.370	0.005	0.080	0.006	0.300	0.610	0.011	7.60	0.004	0.020	
ARITH MEAN		0.060	0.004	0.032	0.004	0.135	0.403	0.007	7.23	0.003	0.013	
GEOM MEAN		0.029			0.004	0.101	0.395		7.23	0.002	0.012	
MINIMUM		0.013	0.002	0.010	0.002	0.030	0.300	0.003	6.50	0.001	0.007	
STD DEV (GEOM *)		0.105			0.001	0.094	0.089		0.34	0.001	0.004	
# SAMP IN STATISTICS		12	5	10	12	12	12	3	12	12	12	
% SAMP (EXCLUDED)			58	16				75				

(CONT'D)

1983 WATER QUALITY DATA REGION 6

74

B.O.W./ SITE: DEAD HORSE CREEK
 SAMPLE POINT: AT HIGHWAY NO.17
 STATION TYPE: RIVER

STATION ID: 01-0068-001-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: DEAD HORSE CREEK

STORET CODE: 02
 001
 2490

LAT: 48 49 06.34 LONG: 086 41 12.09 U T M: 16 0523000.0 5407100.0 4 REGION: 06 DISTANCE: 2.253

*INTERIM TEST-NAME:		RSF	RSP	RST	SS04UR	TCMF	TCMFBK	TURB	ZNUT	
						COLIFORM	COLIFORM			
						TOTAL	TOTAL MF			
						MF	BCKGRD			
						CNT	CNT			
SAMPLE	DATE	TIME	RESIDUE	RESIDUE	RESIDUE	UNF.REAC		TURB'ITY	ZINC	
YYMMDD	LMT	SAMPLE	FILTERED	PARTIC.	TOTAL	MG/L		FTU	MG/L	
		NUMBER	MG/L	MG/L	MG/L	AS S04	/100ML		AS ZN	
830105	1150	10504	82.00	3.00	85.00	5.800	20AID	210	1.40	0.0070
830124	1440	10519	63.00	2.00	65.00	6.700	20AID	100	1.30	0.0060
830224	1727	10537	64.00	1.00	65.00	5.300	10<	20AID	1.50	0.0060
830425	1345	10573	75.00	10.00	85.00	7.500	40AID	180	2.20	0.0060
830525	0845	10591	52.00	3.00	55.00	11.000	70AID	950	1.90	0.0040
830628	0905	10609		1.00	85.00	7.000	690C	3000	0.50	0.0020
830726	0930	10627	129.00	1.00	130.00	6.100	800AID	7100	0.50	0.0050
830823	0925	10645	99.00	1.00	100.00	6.600	2300	18400	0.35	0.0020
830926	1315	10663		1.00	120.00	6.600	1700	3600	0.70	0.0040
831024	1425	10681	108.00	2.00	110.00	8.200	150	200	0.90	0.0060
831122	1135	10699	42.00	3.00	45.00	9.200	870C	3000	2.00	0.007
831219	1345	10717	112.00	8.00	120.00	11.000	150	420	1.10	0.0090
MAXIMUM			129.00	10.00	130.00	11.000	2300	18400	2.20	0.0090
ARITH MEAN			82.60	3.00	88.75	7.583	619	3098	1.20	0.005
GEOM MEAN			78.03	2.13	84.49	7.383		737	1.03	0.005
MINIMUM			42.00	1.00	45.00	5.300	20	20	0.35	0.0020
STD DEV (GEOM *)			28.49	2.95	27.73	1.907		7*	0.63	0.002
# SAMP IN STATISTICS			10	12	12	12	11	12	12	12
% SAMP (EXCLUDED)							8			

1983 WATER QUALITY DATA REGION 6

75

B.O.W./ SITE: KIMBERLY CLARK EFFLUENT CANAL
 SAMPLE POINT: AT HIGHWAY 17
 STATION TYPE: RIVER

STATION ID: 01-0074-001-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: BLACKBIRD CREEK

STORET CODE: 02
 001
 2620

LAT: 48 49 48.27 LONG: 087 04 28.55 U T M: 16 0494525.0 5408350.0 4 REGION: 06 DISTANCE: 13.196

*=INTERIM TEST-NAME:		FWSADP	FGPROJ	ACDT	ALKT	ASUT	BOD5	CLIDUR	COLAP	COND25	DO
							BOD 5 DAY	CHLORIDE	COLOUR	CONDUCT.	DISOLVED
SAMPLE		SAMPLE	PROJECT	ACIDITY	ALK	ARSENIC	TOT.DEM.	UNF.REAC	COLOUR	25C	OXYGEN
DATE	HR	DEPTH	SUB-PROJ	TOTAL	TOTAL	UNF.TOT.	MG/L	MG/L	APPARENT	UMHO/CM	MG/L
YYMMDD	LMT	NUMBER	CODE	AS CACO3	AS CACO3	AS AS	AS O	AS CL-	HZU	AT 25 C	AS O
830104	1615	10503	0101	0.000	152.0		65.00	20.500		415.0	9.2
830124	1350	10518	0101	34.000	65.0	0.0010	180.00	426.000		1780.0	3.2
830224	1808	10536	0101	57.000	32.0		260.00	461.000		1920.0	5.2
830328	1500	10554	0101	145.000	0.0		260.00	548.000		2210.0	3.1
830425	1300	10572	0101	134.000	0.0	0.0020	190.00	544.000	1694.00	2300.0	4.7
830525	0925	10590	0101	0.000	186.0		3.00	20.000	56.000	963.0	11.8
830628	0945	10608	0101	50.000	85.0		240.00	366.000	2265.00	1750.0	2.2
830726	1005	10626	0101	45.000	31.0	0.002	215.00	426.000	1680.00	1700.0	2.1
830823	1005	10644	0101	18.000	77.0		100.00	358.000	980.000	1375.0	2.7
830926	1235	10662	0101	38.000	41.0		180.00	449.000	2169.00	1930.0	2.4
831024	1350	10680	0101	100.000	0.0	1.2000	140.00	413.000	1640.00	1710.0	1.8
831122	1215	10698	0101	173.000	0.0		175.00	535.000	1280.00	2140.0	2.0
831219	1300	10716	0101	11.000	165.0		140.00	203.000	1525.00	1165.0	8.0
MAXIMUM		0.30		173.000	186.0	1.2000	260.00	548.000	2265.00	2300.0	11.8
ARITH MEAN		0.30		61.923	64.2	0.301	165.23	366.885	1476.55	1642.9	4.5
GEOM MEAN						0.008	122.75	261.683	1105.01	1521.2	3.7
MINIMUM		0.30		0.000	0.0	0.0010	3.00	20.000	56.000	415.0	1.8
STD DEV (GEOM *)						0.599	75.87	178.979	663.517	537.6	3.2
# SAMP IN STATISTICS		13		13	13	4	13	13	9	13	13
% SAMP (EXCLUDED)											

*=INTERIM TEST-NAME:		FCHF	FEUT	FSMF	FWPH	FWSTRC	FWTEMP	HARDT	HGUT	MNUT	NNHTFR
		FECAL	IRON	FECAL				HARDNESS	MERCURY	MANGANSE	NH3-N
SAMPLE		COLIFORM	UNF.TOT.	STREPCUS			WATER	TOTAL	UNF.TOT.	UNF.TOT.	TOTAL
DATE	HR	HF	MG/L	HF	PH	STREAM	TEMP	MG/L	UG/L	MG/L	FIL.REAC
YYMMDD	LMT	CNT	AS FE	CNT	FIELD	COND.	DEG.C	AS CACO3	AS HG	AS MN	AS N
830104	1615	10503	0.9600		10.2		13.0	54.000	0.050<	0.150	
830124	1350	10518	1.100		5.8	9	27.0	92.000	0.050<	0.400	
830224	1808	10536	1.2000	1000<	4.9	9	20.1	105.000	0.050<	0.640	
830328	1500	10554	1.6000		3.8	9	27.0		0.050<	0.870	
830425	1300	10572	1.4000		3.25	9	29.0	99.000	0.050<	0.710	
830525	0925	10590	2.2000		11.3	3	4.5	112.000	0.050<	0.170	0.090
830628	0945	10608	1.2000		6.6	9 3	31.0	124.000	0.050<	0.460	
830726	1005	10626	0.760		5.4	9	37.0	119.000	0.050<	0.560	
830823	1005	10644	0.4800		7.1	0	34.5	247.000	0.100<	1.300	
830926	1235	10662	1.1000		5.7	9	33.5	139.000	0.050<	0.650	
831024	1350	10680	0.5000		3.8	9	31.5	111.000	0.100<	1.100	

(C O N T D)

1983 WATER QUALITY DATA REGION 6

76

B.O.W./ SITE: KIMBERLY CLARK EFFLUENT CANAL
 SAMPLE POINT: AT HIGHWAY 17
 STATION TYPE: RIVER

STATION ID: 01-0074-001-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: BLACKBIRD CREEK

STORET CODE: 02
 001
 2620

LAT: 48 49 48.27 LONG: 087 04 28.55

U T M: 16 0494525.0 5408350.0 4

REGION: 06

DISTANCE: 13.196

*INTERIM TEST-NAME:		FCMF FECAL COLIFORM	FEUT IRON UNF.TOT. MG/L	FSMF FECAL STREPCUS MF CNT	FWPH PH FIELD	FWSTRC STREAM COND.	FWTEMP WATER TEMP DEG.C	HARDT HARDNESS TOTAL MG/L	HGUT MERCURY UNF.TOT. UG/L	MNUT MANGANESE UNF.TOT. MG/L	NNHTFR NH3-N TOTAL FIL.REAC MG/L
SAMPLE DATE YYMMDD	HOUR LMT	SAMPLE NUMBER	CNT /100ML	AS FE /100ML				AS CAC03	AS HG	AS MN	AS N
831122	1215	10698	10<	1.1000	3.2	9	29.0	146.000	0.100<	0.410	
831219	1300	10716	100000<	0.6700	7.9	0	18.0	86.000	0.100<	0.230	
MAXIMUM		480E+05		2.2000	11.3		37.0	247.000		1.300	0.090
ARITH MEAN		113E+05		1.098	6.1		25.8	119.500		0.588	0.090
GEOM MEAN				1.008	5.6		23.1	112.441		0.489	
MINIMUM		10		0.4800	3.2		4.5	54.000		0.150	0.090
STD DEV (GEOM *)				0.469	2.5		9.4	46.988		0.347	
# SAMP IN STATISTICS		5	13		13		13	12		13	1
% SAMP (EXCLUDED)		61									

*INTERIM TEST-NAME:		NN02FR N02-N FIL.REAC MG/L	NN03FR N03-N FIL.REAC MG/L	NNTKUR K'DAHL N TOTAL UNF.REAC MG/L	PH PH	PP04FR P04 FIL.REAC MG/L	PPUT PHOSPHOR UNF.TOT. MG/L	RSP RESIDUE PARTIC. MG/L	RST RESIDUE TOTAL MG/L	SS04UR SULPHATE UNF.REAC MG/L	TCMF COLIFORM TOTAL MF CNT
SAMPLE DATE YYMMDD	HOUR LMT	SAMPLE NUMBER	AS N	AS N	AS N	AS P	AS P	MG/L	MG/L	AS S04	/100ML
830104	1615	10503			0.850	10.00		0.210	85.00	430.00	41.000
830124	1350	10518			2.400	6.30		0.410	55.00	1460.00	70.000
830224	1808	10536			2.200	4.90		0.520	50.00	1690.00	70.000
830328	1500	10554			2.200	3.40		0.740	85.00	1730.00	74.000
830425	1300	10572			2.000	3.10		0.620	45.00	1650.00	96.000
830525	0925	10590	0.004	0.210	0.460	10.90	0.003	0.120	100.00	650.00	225.000
830628	0945	10608			2.800	6.70		0.055	60.00	1620.00	90.000
830726	1005	10626			2.700	5.90		0.380	50.00	1490.00	50.000
830823	1005	10644			1.100	6.80		0.360	40.00	1190.00	38.000
830926	1235	10662			2.200	6.00		0.330	30.00	1540.00	76.000
831024	1350	10680			1.700	3.70		0.280	40.00	1350.00	50.000
831122	1215	10698			2.500	3.00		0.540	40.00	1420.00	56.000
831219	1300	10716			2.200	7.40		0.310	45.00	1070.00	82.000
MAXIMUM		0.004	0.210	2.800	10.90	0.003	0.740	100.00	1730.00	225.000	690E+05
ARITH MEAN		0.004	0.210	1.947	6.01	0.003	0.375	55.77	1330.00	78.308	109E+05
GEOM MEAN				1.760	5.55		0.314	52.53	1248.25	69.940	
MINIMUM		0.004	0.210	0.460	3.00	0.003	0.055	30.00	430.00	38.000	30
STD DEV (GEOM *)				0.722	2.48		0.194	21.20	401.12	47.663	
# SAMP IN STATISTICS		1	1	13	13	1	13	13	13	13	8
% SAMP (EXCLUDED)											38

(CONTD)

1983 WATER QUALITY DATA REGION 6

77

B.O.W./ SITE: KIMBERLY CLARK EFFLUENT CANAL
 SAMPLE POINT: AT HIGHWAY 17
 STATION TYPE: RIVER

STATION ID: 01-0074-001-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: BLACKBIRD CREEK

STORET CODE: 02
 001
 2620

LAT: 48 49 48.27 LONG: 087 04 28.55 U T M: 16 0494525.0 5408350.0 4 REGION: 06 DISTANCE: 13.196

*INTERIM TEST-NAME:		TCHFBK	TURB
		COLIFORM	
		TOTAL MF	
		BCKGRD	
SAMPLE		CNT	TURB'ITY
DATE HOUR	SAMPLE		FTU
YYMMDD LMT	NUMBER	/100ML	
830104 1615	10503	2000	22.00
830124 1350	10518	300E+06	1.80
830224 1808	10536	17000	32.00
830328 1500	10554	100<	7.30
830425 1300	10572	100<	5.70
830525 0925	10590	1600	27.00
830628 0945	10608	66000	2.40
830726 1005	10626	100E+05>	4.40
830823 1005	10644	100E+06>	4.10
830926 1235	10662	770E+05	1.90
831024 1350	10680	2000	5.20
831122 1215	10698	20000AID	8.30
831219 1300	10716	270E+05	2.50
MAXIMUM		300E+06	32.00
ARITH MEAN		449E+05	9.58
GEOM MEAN			5.98
MINIMUM		1600	1.80
STD DEV (GEOM *)			10.33
# SAMP IN STATISTICS		9	13
% SAMP (EXCLUDED)		30	

1983 WATER QUALITY DATA REGION 6

78

B.O.W./ SITE: NIPIGON RIVER
 SAMPLE POINT: AT BRIDGE CAMERON FALLS
 STATION TYPE: RIVER FLOW GAUGE FED 02AD008

STATION ID: 01-0090-001-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR

STORET CODE: 02
 001

LAT: 49 09 02.86 LONG: 088 20 52.80 U T M: 16 0401700.0 5444875.0 4 REGION: 06 DISTANCE: 18.990

*INTERIM TEST-NAME:		FWSADP	FGPROJ	ALKT	ALUT	ASUT	BOD5	CDUT	CLIDUR	COLAP	COND25
							BOD 5 DAY				
SAMPLE DATE	HR	SAMPLE NUMBER	SAMPLE DEPTH M	PROJECT SUB-PROJ CODE	ALK TOTAL MG/L AS CAC03	ALUMINUM UNF.TOT. MG/L AS AL	ARSENIC UNF.TOT. MG/L AS AS	CADMIUM UNF.TOT. MG/L AS CD	CHLORIDE UNF.REAC MG/L AS CL-	COLOUR APPARENT HZU	CONDUCT. 25C UMHO/CM AT 25 C
YYMMDD	LMT										
830104	1235	10501	0.30	0101	72.0	0.040		0.40	0.0005<	0.900	153.0
830124	1100	10516	0.30	0101	72.0	0.050	0.0010<	0.20	0.0005<	1.000	154.0
830225	0816	10534	0.30	0101	74.0	0.020		0.30	0.0010	0.900	148.0
830329	1700	10552	0.30	0101	73.0	0.020		0.50	0.0010	0.900	157.0
830426	1310	10570	0.30	0101	68.0	0.030	0.0010	0.10	0.0005<	0.800	155.0
830525	1150	10588	0.30	0101	68.0	0.010<		0.30	0.0005<	0.800	142.0
830628	1300	10606	0.30	0101	72.0	0.029		0.40	0.0005<	0.900	142.0
830726	1330	10624	0.30	0101	70.0	0.010<	0.0010	0.80	0.0010	2.100	143.0
830823	1420	10642	0.30	0101	71.0	0.020		0.50	0.0005<	1.000	141.0
830928	1400	10660	0.30	0101	71.0	0.010<		0.80	0.0005<	0.800	146.0
831025	1550	10678	0.30	0101	71.0	0.030	0.0010	0.40	0.0005<	0.900	145.0
831122	1555	10696	0.30	0101	72.0	0.020		0.30	0.0005<	0.900	144.0
831220	1715	10714	0.30	0101	73.0	0.015		0.50	0.0005<	0.800	146.0
MAXIMUM			0.30		74.0	0.050	0.0010	0.80	0.0010	2.100	157.0
ARITH MEAN			0.30		71.3	0.027	0.0010	0.42	0.0010	0.977	147.4
GEOM MEAN					71.3			0.37		0.942	147.3
MINIMUM			0.30		68.0	0.015	0.0010	0.10	0.0010	0.800	141.0
STD DEV (GEOM *)					1.8			0.20		0.344	5.5
# SAMP IN STATISTICS			13		13	10	3	13	3	13	13
% SAMP (EXCLUDED)						23	25		76		

*INTERIM TEST-NAME:		COBT	CRUT	CUUT	DO	FCMF	FEUT	FWFLOW	FWPH	FWTEMP	HARDT
						FECAL					
SAMPLE DATE	HR	COBALT UNF.TOT. MG/L AS CO	CHROMIUM UNF.TOT. MG/L AS CR	COPPER UNF.TOT. MG/L AS CU	DISSOLVED OXYGEN MG/L AS O	COLIFORM MF CNT /100ML	IRON UNF.TOT. MG/L AS FE	STREAM FLOW M3 /S	PH FIELD	WATER TEMP DEG.C	HARDNESS TOTAL MG/L AS CAC03
YYMMDD	LMT										
830104	1235	10501	0.0020<	0.0020<	0.0010	12.2	4<	0.0500	397.000	7.8	72.000
830124	1100	10516	0.0020<	0.0020<	0.0020		4<	0.0320	262.000	7.4	74.000
830225	0816	10534	0.0020<	0.0020<	0.0020	13.6	4<	0.0100	368.000	7.8	73.000
830329	1700	10552	0.0020<	0.0020<	0.0030	12.2	4<	0.0440	383.000	7.6	72.000
830426	1310	10570	0.0020<	0.0020<	0.0030	13.2	4<	0.0380	351.000	7.9	72.000
830525	1150	10588	0.0020<	0.0020<	0.0010	12.9	4<	0.0360	240.000	7.4	74.000
830628	1300	10606	0.0020<	0.0020<	0.0030	12.7	4<	0.0360	251.000	8.2	73.000
830726	1330	10624	0.0020<	0.0050	0.0030	10.1	4<	0.0300	188.000	8.2	73.000
830823	1420	10642	0.0020	0.0020<	0.0020	8.4	4<	0.0350	184.000	8.1	76.000
830928	1400	10660	0.0020<	0.0020<	0.0020	9.8	4<	0.0330	183.000		74.000
831025	1550	10678	0.0020<	0.0020	0.0030	10.4	4<	0.0650	342.000	7.6	67.000
831122	1555	10696	0.0020<	0.0020<	0.0020	12.8	4<	0.0410	340.000	7.5	73.000

(CONTD)

1983 WATER QUALITY DATA REGION 6

79

B.O.W./ SITE: NIPIGON RIVER
 SAMPLE POINT: AT BRIDGE CAMERON FALLS
 STATION TYPE: RIVER FLOW GAUGE FED 02AD008

STATION ID: 01-0090-001-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR

STORET CODE: 02
 001

LAT: 49 09 02.86 LONG: 088 20 52.80 U T M: 16 0401700.0 5444875.0 4 REGION: 06 DISTANCE: 18.990

*INTERIM TEST-NAME:		COUT	CRUT	CUUT	DO	FCMF FECAL COLIFORM MF CNT /100ML	FEUT IRON UNF.TOT. MG/L AS FE	FWFLOW STREAM FLOW M3 /S	FWPH PH FIELD	FWTEMP WATER TEMP DEG.C	HARDT HARDNESS TOTAL MG/L AS CaCO3
SAMPLE DATE HOUR YYMMDD LMT	SAMPLE NUMBER	COBALT UNF.TOT. MG/L AS CO	CHROMIUM UNF.TOT. MG/L AS CR	COPPER UNF.TOT. MG/L AS CU	DISOLVED OXYGEN MG/L AS O						
831220 1715	10714	0.0020<	0.0020<	0.0020	14.8	4<	0.0280	366.000	7.8	1.5	74.000
	MAXIMUM	0.0020	0.0050	0.0030	14.8		0.0650	397.000	8.2	20.0	76.000
	ARITH MEAN	0.0020	0.0030	0.0022	11.9		0.0368	296.538	7.8	6.8	72.846
	GEOM MEAN			0.0021	11.8		0.0343	285.442	7.8	3.8	72.818
	MINIMUM	0.0020	0.0020	0.0010	8.4		0.0100	183.000	7.4	1.0	67.000
	STD DEV (GEOM *)			0.0007	1.9		0.0127	80.737	0.3	7.0	2.075
	# SAMP IN STATISTICS	1	3	13	12		13	13	12	13	13
	% SAMP (EXCLUDED)	92	76								

*INTERIM TEST-NAME:		MNUT	NIUT	NNHFR NH3-N TOTAL FIL.REAC MG/L AS N	NNO2FR NO2-N FIL.REAC MG/L AS N	NNO3FR NO3-N FIL.REAC MG/L AS N	NNTKUR K'DAHL N TOTAL UNF.REAC MG/L AS N	PBUT LEAD UNF.TOT. MG/L AS PB	PH	PP04FR P04 FIL.REAC MG/L AS P	PPUT PHOSPHOR UNF.TOT. MG/L AS P
SAMPLE DATE HOUR YYMMDD LMT	SAMPLE NUMBER	MANGANESE UNF.TOT. MG/L AS MN	NICKEL UNF.TOT. MG/L AS NI								
830104 1235	10501	0.002	0.002 <	0.010<	0.001<	0.070	0.210	0.003<	8.00	0.002	0.014
830124 1100	10516	0.001	0.002 <	0.010<	0.001<	0.080	0.390	0.003<	7.90	0.002	0.008
830225 0816	10534	0.002	0.002 <	0.010<	0.001<	0.080	0.170	0.003<	7.80	0.001	0.004
830329 1700	10552	0.003	0.006	0.010<	0.001<	0.080	0.210	0.003<	7.80	0.004	0.008
830426 1310	10570	0.002	0.002 <	0.010<	0.001<	0.070	0.190	0.003<	8.00	0.001	0.007
830525 1150	10588	0.002	0.002 <	0.010<	0.002	0.050	0.210	0.003<	8.00	0.001<	0.006
830628 1300	10606	0.022	0.0020	0.010<	0.002	0.037	0.260	0.003<	7.90	0.001	0.008
830726 1330	10624	0.003	0.003	0.030	0.001	0.020	0.230	0.003<	8.00	0.003	0.004
830823 1420	10642	0.001	0.002	0.010<	0.001<	0.010<	0.250	0.004	7.90	0.001	0.008
830928 1400	10660	0.003	0.002 <	0.010<	0.002	0.010	0.350	0.003<	7.90	0.002	0.012
831025 1550	10678	0.005	0.002	0.010<	0.001	0.040	0.200	0.003<	7.80	0.002	0.008
831122 1555	10696	0.003	0.002 <	0.010<	0.001<	0.070	0.200	0.003<	7.80	0.003	0.006
831220 1715	10714	0.002	0.002	0.020	0.001	0.080	0.200	0.003	7.70	0.005	0.008
	MAXIMUM	0.022	0.006	0.030	0.002	0.080	0.390	0.004	8.00	0.005	0.014
	ARITH MEAN	0.004	0.003	0.025	0.001	0.057	0.236	0.003	7.88	0.002	0.008
	GEOM MEAN	0.003					0.229		7.88		0.007
	MINIMUM	0.001	0.0020	0.020	0.001	0.010	0.170	0.003	7.70	0.001	0.004
	STD DEV (GEOM *)	0.006					0.064		0.10		0.003
	# SAMP IN STATISTICS	13	6	2	6	12	13	2	13	12	13
	% SAMP (EXCLUDED)		53	84	53	7		84		7	

(C O N T D)

1983 WATER QUALITY DATA REGION 6

80

B.D.W./ SITE: NIPIGON RIVER
 SAMPLE POINT: AT BRIDGE CAMERON FALLS
 STATION TYPE: RIVER FLOW GAUGE FED 02AD008

STATION ID: 01-0090-001-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR

STORET CODE: 02
 001

LAT: 49 09 02.86 LONG: 088 20 52.80 U T M: 16 0401700.0 5444875.0 4 REGION: 06 DISTANCE: 18.990

*INTERIM TEST-NAME:		RSP	RST	SS04UR	TCMF COLIFORM TOTAL MF	TCMFBK COLIFORM TOTAL MF BCKGRD	TURB TURB'ITY FTU	ZNUT ZINC UNF.TOT. MG/L AS ZN
SAMPLE DATE YYMMDD	HOURL LMT	SAMPLE NUMBER	RESIDUE PARTIC. MG/L	RESIDUE TOTAL MG/L	SULPHATE UNF.REAC MG/L AS S04	CNT /100ML	CNT /100ML	
830104	1235	10501	1.00	100.00	1.000<	4	4	0.65
830124	1100	10516	1.00	65.00	2.500	4<	4<	0.60
830225	0816	10534	1.00	85.00	1.600	4<	4	0.60
830329	1700	10552	1.00	100.00	2.200	4<	4<	0.30
830426	1310	10570	1.00	100.00	2.800	10<	10<	0.25
830525	1150	10588	1.00	100.00	4.000	4<	4<	0.35
830628	1300	10606	1.00	95.00	3.600	4	44	0.40
830726	1330	10624	2.00	110.00	2.300	250	490	0.40
830823	1420	10642	1.00	110.00	3.000	210	240	0.40
830928	1400	10660	1.00	110.00	1.900	70AID	790	0.40
831025	1550	10678	2.00	110.00	2.500	10<	60AID	0.65
831122	1555	10696	1.00	120.00	3.000	10<	40AID	0.60
831220	1715	10714	1.00	110.00	3.300	10AID	10<	0.65
MAXIMUM		2.00	120.00	4.000	250	790	0.65	0.0020
ARITH MEAN		1.15	101.15	2.725	91	209	0.48	0.001
GEOM MEAN		1.11	100.11				0.46	
MINIMUM		1.00	65.00	1.600	4	4	0.25	0.0010
STD DEV (GEOM *)		0.38	14.02				0.15	
# SAMP IN STATISTICS		13	13	12	6	8	13	8
% SAMP (EXCLUDED)				7	53	38		38

1983 WATER QUALITY DATA REGION 6

81

B.O.W./ SITE: NIPIGON RIVER
 SAMPLE POINT: AT HIGHWAY 17, NIPIGON
 STATION TYPE: RIVER

STATION ID: 01-0090-002-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR

STORET CODE: 02
 001

LAT: 49 01 11.56 LONG: 088 15 02.77 U T M: 16 0408550.0 5430200.0 4 REGION: 06 DISTANCE: 9.656

*=INTERIM TEST-NAME:		FWSADP	FGPROJ	ALKT	ASUT	CDUT	COD	COLAP	COND25	CRUT	CUUT
SAMPLE		SAMPLE DEPTH M	PROJECT SUB-PROJ CODE	ALK	ARSENIC	CADMIUM	CHEM. OX	COLOUR APPARENT HZU	CONDUCT.	CHROMIUM	COPPER
DATE	HOUR			TOTAL MG/L	UNF.TOT. MG/L	UNF.TOT. MG/L	DEMAND MG/L		25C	UNF.TOT. MG/L	UNF.TOT. MG/L
YYMMDD	LMT	NUMBER		AS CAC03	AS AS	AS CD	AS O		UMHO/CM AT 25 C	AS CR	AS CU
830104	1340	10502	0101	73.0	0.0010	0.0005<			154.0	0.0020<	0.0010
830124	1135	10517	0101	73.0	0.0010<	0.0005<			154.0	0.0020<	0.0030
830225	0742	10535	0101	74.0	0.0010<	0.0010			156.0	0.0020<	0.0020
830329	1615	10553	0101	73.0	0.0010<	0.0010			156.0	0.0020<	0.0060
830426	1240	10571	0101	69.0	0.0010	0.0005<		10.000	148.0	0.0020	0.0030
830525	1125	10589	0101	67.0	0.0010	0.0005<		22.000	148.0	0.0020	0.0030
830628	1230	10607	0101	74.0			26	14.000	145.0		
830726	1300	10625	0101	71.0	0.014	0.010		12.000	145.0	0.003	0.002
830823	1345	10643	0101	72.0		0.0005<		14.000	142.0	0.0050	0.0020
830926	1010	10661	0101	73.0	0.0010<	0.0005<		13.000	149.0	0.0020	0.0020
831025	1530	10679	0101	73.0	0.0019	0.0005<		17.000	148.0	0.0030<	0.0040
831122	1525	10697	0101	73.0	0.0010<	0.0005<		16.000	147.0	0.0030	0.0010
831220	1640	10715	0101	75.0	0.0015	0.0005<		13.000	149.0	0.0050	0.0020
MAXIMUM		0.30		75.0	0.014	0.010	26	22.000	156.0	0.0050	0.0060
ARITH MEAN		0.30		72.3	0.003	0.004	26	14.556	149.3	0.003	0.003
GEOM MEAN				72.3				14.221	149.2		0.002
MINIMUM		0.30		67.0	0.0010	0.0010	26	10.000	142.0	0.0020	0.0010
STD DEV (GEOM *)				2.2				3.468	4.4		0.001
# SAMP IN STATISTICS		13		13	6	3	1	9	13	7	12
% SAMP (EXCLUDED)					45	75				41	

*=INTERIM TEST-NAME:		DO	FCHF	FSMF	FMPH	FWSTRC	FWTEMP	HGUT	NN02FR	NN03FR	NNTKUR
SAMPLE		DISOLVED OXYGEN MG/L	FECAL COLIFORM MF CNT	FECAL STREPCUS MF CNT	PH FIELD	STREAM COND.	WATER TEMP DEG.C	MERCURY UNF.TOT. UG/L	NO2-N FIL.REAC MG/L	NO3-N FIL.REAC MG/L	K'DAHL N TOTAL UNF.REAC MG/L
DATE	HOUR										
YYMMDD	LMT	AS O	/100HL	/100HL				AS HG	AS N	AS N	AS N
830104	1340	12.5	4<	4<	7.4		1.0	0.050<	0.001<	0.070	0.200
830124	1135	14.0	4<	4<	7.5		2.0	0.050<	0.001<	0.070	0.330
830225	0742	13.4	4<	4<	7.65		1.0	0.050<	0.001<	0.080	0.170
830329	1615	10553	4<	4<	7.6		1.0	0.050<	0.001<	0.080	0.220
830426	1240	10571	4<	4<	7.2		2.0	0.050<	0.001<	0.070	0.210
830525	1125	10589	4<	48	7.6	3	5.0	0.050<	0.003	0.050	0.360
830628	1230	10607	4<	4<	7.8		13.2		0.062	0.320	0.330
830726	1300	10625	4<	60	8.5		21.0	0.05 <	0.004	0.010<	0.240
830823	1345	10643	4<	4	8.3		21.0		0.001	0.010<	0.220
830926	1010	10661	8	4<	7.9		14.0	0.050<	0.002	0.010<	0.240
831025	1530	10679	4<	8	7.2		9.0	0.050<	0.002	0.020	0.220
831122	1525	10697	4<	7.6	7.6		3.0	0.050<	0.001<	0.060	0.200
831220	1640	10715	4<	4<	7.8		1.0	0.050<	0.001	0.080	0.190

(CONTD)

1983 WATER QUALITY DATA REGION 6

82

B.O.W./ SITE: NIPIGON RIVER
 SAMPLE POINT: AT HIGHWAY 17, NIPIGON
 STATION TYPE: RIVER

STATION ID: 01-0090-002-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR

STORET CODE: 02
 001

LAT: 49 01 11.56 LONG: 088 15 02.77 U T M: 16 0408550.0 5430200.0 4 REGION: 06 DISTANCE: 9.656

*=INTERIM TEST-NAME:		DO	FCMF FECAL COLIFORM	FSMF FECAL STREPCUS	FMPH	FWSTRC	FWTEMP	HGUT	NN02FR	NN03FR	NNTKUR K'DAHL N TOTAL
SAMPLE DATE YYMMDD	HR LMT	SAMPLE NUMBER	DISOLVED OXYGEN MG/L AS O	MF CNT /100ML	MF CNT /100ML	PH FIELD	WATER TEMP DEG.C	MERCURY UNF.TOT. UG/L AS HG	NO2-N FIL.REAC MG/L AS N	NO3-N FIL.REAC MG/L AS N	UNF.REAC MG/L AS N
MAXIMUM		14.0	8	60	8.5		21.0		0.062	0.320	0.360
ARITH MEAN		11.8	8	30	7.7		7.2		0.011	0.090	0.241
GEOM MEAN		11.6			7.7		3.9				0.235
MINIMUM		8.4	8	4	7.2		1.0		0.001	0.020	0.170
STD DEV (GEOM *)		1.9			0.4		7.6				0.060
# SAMP IN STATISTICS		13	1	4	13		13		7	10	13
% SAMP (EXCLUDED)			92	66					46	23	

*=INTERIM TEST-NAME:		PBUT	PH	PP04FR	PPUT	RSF	RSP	TCMF COLIFORM TOTAL	TCMFBK COLIFORM TOTAL MF BCKGRD	TURB	ZNUT	
SAMPLE DATE YYMMDD	HR LMT	SAMPLE NUMBER	LEAD UNF.TOT. MG/L AS PB	PH	P04 FIL.REAC MG/L AS P	PHOSPHOR UNF.TOT. MG/L AS P	RESIDUE FILTERED MG/L	RESIDUE PARTIC. MG/L	CNT /100ML	CNT /100ML	TURB'ITY FTU	ZINC UNF.TOT. MG/L AS ZN
830104	1340	10502	0.003<	7.90	0.002	0.009	117.00	3.00	4<	12		0.0020
830124	1135	10517	0.003<	8.00	0.003	0.008	88.00	2.00	4<	44		0.0010
830225	0742	10535	0.003<	7.80	0.001	0.004	117.00	3.00	4<	4		0.0010<
830329	1615	10553	0.003<	7.90	0.002	0.009	119.00	1.00	4<	4		0.003
830426	1240	10571	0.003<	7.90	0.002	0.006	108.00	2.00	4	12	0.85	0.001 <
830525	1125	10589	0.003<	7.90	0.004	0.086	120.00	140.00	44	136	39.00	0.0080
830628	1230	10607	0.003<	8.00	0.002	0.012	110.00	3.00	4<	128	1.20	
830726	1300	10625	0.009	8.20	0.002	0.005	127.00	3.00	30AID	560	1.60	0.002
830823	1345	10643	0.005	8.20	0.001	0.011	90.00	5.00	10<	3000	3.10	0.0010
830926	1010	10661	0.003<	8.00	0.002	0.012	117.00	3.00	20AID	610	1.70	0.0010
831025	1530	10679	0.009	8.00	0.003	0.011	60.00	7.00	40AID	700	2.10	0.0770
831122	1525	10697	0.003<	7.90	0.004	0.008	138.00	2.00	80AID	390	0.85	0.001 <
831220	1640	10715	0.003<	7.80	0.005	0.007	109.00	1.00	10<	10<	0.75	0.0010
MAXIMUM		0.009	8.20	0.005	0.086	138.00	140.00	80	3000	39.00	0.0770	
ARITH MEAN		0.008	7.96	0.003	0.014	109.23	13.46	36	467	5.68	0.011	
GEOM MEAN			7.96	0.002	0.010	107.19	3.44			1.97		
MINIMUM		0.005	7.80	0.001	0.004	60.00	1.00	4	4	0.75	0.0010	
STD DEV (GEOM *)			0.13	0.001	0.022	19.96	38.05			12.52		
# SAMP IN STATISTICS		3	13	13	13	13	13	6	12	9	9	
% SAMP (EXCLUDED)		75						53	7		25	

1983 WATER QUALITY DATA REGION 6

83

B.O.W./ SITE: BLACK STURGEON RIVER
 SAMPLE POINT: AT HIGHWAYS 11 AND 17
 STATION TYPE: RIVER FLOW GAUGE FED 02AC002

STATION ID: 01-0092-001-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: BLACK STURGEON RIVER

STORET CODE: 02
 001
 7370

LAT: 48 54 15.06 LONG: 088 22 39.06

U T M: 16 0399050.0 5417500.0 4

REGION: 06

DISTANCE: 13.196

*=INTERIM TEST-NAME:		FWSADP	FGPROJ	ALKT	ALUT	ASUT	CDUT	COND25	CRUT	CUUT	DO
SAMPLE		SAMPLE	PROJECT	ALK	ALUMINUM	ARSENIC	CADMIUM	CONDUCT.	CHROMIUM	COPPER	DISOLVED
DATE	HOUR	DEPTH	SUB-PROJ	TOTAL	UNF.TOT.	UNF.TOT.	UNF.TOT.	25C	UNF.TOT.	UNF.TOT.	OXYGEN
YYMMDD	LMT	NUMBER	CODE	MG/L	MG/L	MG/L	MG/L	UMHO/CM	MG/L	MG/L	MG/L
			AS CAC03		AS AL	AS AS	AS CD	AT 25 C	AS CR	AS CU	AS O
830104	1025	10500	0101	58.0		0.0010	0.0012	221.0	0.0040	0.0100	12.4
830124	1015	10515	0101	73.0		0.0010	0.0005<	264.0	0.0090	0.0210	13.7
830225	0906	10533	0101	67.0		0.0010<	0.0005	243.0	0.0030	0.0090	13.8
830329	1900	10551	0101	65.0		0.0010<	0.0020	242.0	0.0020<	0.0080	12.0
830426	1550	10569	0101	50.0		0.0010<	0.0010	168.0	0.0020	0.0060	12.4
830524	1025	10587	0101	46.0		0.0010<	0.0005<	150.0	0.0020<	0.0030	11.0
830627	1005	10605	0101	55.0		0.0013	0.0005<	183.0	0.0020<	0.0050	9.8
830725	1055	10623	0101	58.0		0.0010	0.0010	220.0	0.0020<	0.0050	8.3
830822	1000	10641	0101	72.0	0.001	0.0010<	0.0005<	282.0	0.0020<		8.1
830926	0935	10659	0101	76.0		0.0010<	0.0005<	317.0	0.0020	0.0040	10.3
831024	0955	10677	0101	56.0		0.0010	0.0005<	233.0	0.0020	0.0040	13.6
831121	0945	10695	0101	57.0		0.0010<	0.0005<	215.0	0.0040	0.0030	14.5
831219	1005	10713	0101	58.0		0.0010	0.0005<	204.0	0.0050	0.0030	16.7
		MAXIMUM	0.30	76.0	0.001	0.0013	0.0020	317.0	0.0090	0.0210	16.7
		ARITH MEAN	0.30	60.8	0.001	0.0010	0.0011	226.3	0.0039	0.0067	12.0
		GEOM MEAN		60.2				222.0		0.0056	11.8
		MINIMUM	0.30	46.0	0.001	0.0010	0.0005	150.0	0.0020	0.0030	8.1
		STD DEV (GEOM *)		9.1				45.7		0.0051	2.5
		* SAMP IN STATISTICS	13	13	1	6	5	13	8	12	13
		% SAMP (EXCLUDED)				53	61		38		
*=INTERIM TEST-NAME:		FWFLOW	FWPH	FWSTRC	FWTEMP	HGUT	PBUT	PH	PP04FR	PPUT	RSF
SAMPLE		STREAM			WATER	MERCURY	LEAD		PO4	PHOSPHOR	
DATE	HOUR	FLOW	PH	STREAM	TEMP	UNF.TOT.	UNF.TOT.		FIL.REAC	UNF.TOT.	RESIDUE
YYMMDD	LMT	M3	FIELD	COND.	DEG.C	UG/L	MG/L		MG/L	MG/L	FILTERED
		/S				AS HG	AS PB	PH	AS P	AS P	MG/L
830104	1025	18.300	7.1	4	1.0	0.050<	0.003	7.70	0.001	0.073	185.00
830124	1015	12.600	6.5	4	1.0	0.050<	0.003 <	7.60	0.002	0.250	200.00
830225	0906	8.800	7.55	4	1.0	0.050<	0.003 <	7.60	0.002	0.180	200.00
830329	1900	10551	7.3	4	1.0	0.050<	0.012	7.60	0.001	0.020	180.00
830426	1550	10569	7.7	3	1.0	0.050<	0.003 <	7.60	0.004	0.037	135.00
830524	1025	10587	7.0	3	9.0	0.050<	0.003 <	7.60	0.002	0.027	145.00
830627	1005	10605	7.4	3	16.5	0.050<	0.0030<	7.80	0.002	0.016	104.00
830725	1055	10623	7.1		24.0	0.050<	0.003 <	7.70		0.013	164.00
830822	1000	10641	7.5		22.0	0.050<	0.006	7.80	0.004	0.017	185.00
830926	0935	10659	7.6		11.0	0.050<	0.003	7.80	0.004	0.014	207.00
831024	0955	10677	7.3		5.5	0.050<	0.003 <	7.60	0.017	0.031	186.00
831121	0945	10695	7.2		1.5	0.050<	0.003 <	7.30	0.004	0.014	175.00
831219	1005	10713	6.8	4	1.0	0.050<	0.003 <	7.40	0.004	0.210	146.00

(CONT D)

1983 WATER QUALITY DATA REGION 6

84

B.O.W./ SITE: BLACK STURGEON RIVER
 SAMPLE POINT: AT HIGHWAYS 11 AND 17
 STATION TYPE: RIVER FLOW GAUGE FED 02AC002

STATION ID: 01-0092-001-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: BLACK STURGEON RIVER

STORET CODE: 02
 001
 7370

LAT: 48 54 15.06 LONG: 088 22 39.06 U T M: 16 0399050.0 5417500.0 4 REGION: 06 DISTANCE: 13.196

*=INTERIM	TEST-NAME:	FWFLOW STREAM FLOW	FMPH	FWSTRC	FWTEMP	HGUT MERCURY	PBUT LEAD	PH	PP04FR P04 FIL.REAC	PPUT PHOSPHOR UNF.TOT.	RSF RESIDUE FILTERED	
SAMPLE DATE YYMMDD	HOURL LMT	SAMPLE NUMBER	M3 /S	PH FIELD	STREAM COND.	WATER TEMP DEG.C	UNF.TOT. UG/L AS HG	UNF.TOT. MG/L AS PB	PH	MG/L AS P	MG/L AS P	MG/L
		MAXIMUM	66.700	7.7		24.0		0.012	7.80	0.017	0.250	207.00
		ARITH MEAN	20.658	7.2		7.3		0.006	7.62	0.004	0.069	170.15
		GEOM MEAN	16.355	7.2		3.4			7.62	0.003	0.038	167.38
		MINIMUM	5.070	6.5		1.0		0.003	7.30	0.001	0.013	104.00
		STD DEV (GEOM *)	16.287	0.3		8.5			0.15	0.004	0.085	30.02
		# SAMP IN STATISTICS	13	13		13		4	13	12	13	13
		% SAMP (EXCLUDED)						69				

*=INTERIM	TEST-NAME:	RSP	ZNUT ZINC
SAMPLE DATE YYMMDD	HOURL LMT	SAMPLE NUMBER	RESIDUE PARTIC. MG/L AS ZN
830104	1025	10500	85.00
830124	1015	10515	320.00
830225	0906	10533	150.00
830329	1900	10551	10.00
830426	1550	10569	35.00
830524	1025	10587	25.00
830627	1005	10605	6.00
830725	1055	10623	6.00
830822	1000	10641	15.00
830926	0935	10659	3.00
831024	0955	10677	4.00
831121	0945	10695	5.00
831219	1005	10713	4.00
		MAXIMUM	320.00
		ARITH MEAN	51.38
		GEOM MEAN	16.03
		MINIMUM	3.00
		STD DEV (GEOM *)	91.34
		# SAMP IN STATISTICS	13
		% SAMP (EXCLUDED)	13

85

STORET CODE: 02
001
7880

DISTANCE: 0.483

*INTERIM		TEST-NAME:	CRUT	CUUT	DO	FCHM FECAL COLIFORM	FEUT	FWFLOW	FWPH	FWSTRC	FWTEMP	HARDT
			CHROMIUM UNF. TOT. MG/L AS CR	COPPER UNF. TOT. MG/L AS CU	DISOLVED OXYGEN MG/L AS O	IRON UNF. TOT. MG/L AS FE	STREAM FLOW M3 /S		PH FIELD	STREAM COND.	WATER TEMP DEG.C	HARDNESS TOTAL MG/L AS CaCO3
SAMPLE DATE YYMMDD	HR LMT	SAMPLE NUMBER										
830110	1220	10008	0.0020<	0.0020	13.0	4<	0.4500	1.920	7.3	4	0.5	35.000
830214	1240	10022			13.3	4		1.410	7.2	4	0.8	39.000
830314	1340	10035			10.6	4		2.470	7.5		1.2	37.000
830412	1430	10048	0.0050	0.0020	13.9	12	0.5600	3.100	7.6	3	1.0	38.000
830517	1115	10070	0.0020<	0.0020	11.6	8	0.3200	12.200	7.0	8	7.5	20.000
830613	1410	10092			9.2	4		7.670	7.1	8	18.0	25.000
830704	1110	10115	0.0020<	0.0020	8.6	88	0.4300	7.710	7.1		17.0	37.000
830815	1430	10138	0.0110	0.0010	7.8	20AID	0.6400	0.702	7.8	8	24.0	52.000
830920	1430	10162	0.0020	0.0010	9.2	36	0.8300	0.617	8.0	8	15.0	61.000
831011	1020	10185			10.9	40		2.140	7.7	8	10.5	49.000
831114	1350	10199			13.6	4		2.700	7.2	8	1.0	33.000
831212	1430	10212			13.3	4		4.500	7.1	8	1.0	28.000

(C O N T D)

1983 WATER QUALITY DATA REGION 6

86

B.O.W./ SITE: CURRENT RIVER
 SAMPLE POINT: AT CUMBERLAND STREET THUNDER BAY
 STATION TYPE: RIVER FLOW GAUGE FED 02AB015

STATION ID: 01-0104-001-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: CURRENT RIVER

STORET CODE: 02
 001
 7880

LAT: 48 27 19.18 LONG: 089 11 10.76 U T M: 16 0338350.0 5369000.0 4 REGION: 06 DISTANCE: 0.483

**INTERIM TEST-NAME:		CRUT	CUUT	DO	FCMF FECAL	FEUT	FWFLOW	FWPH	FWSTRC	FWTEMP	HARDT
		CHROMIUM UNF.TOT. MG/L	COPPER UNF.TOT. MG/L	DISOLVED OXYGEN MG/L	COLIFORM HF CNT /100ML	IRON UNF.TOT. MG/L	STREAM FLOW M3 /S	PH FIELD	STREAM COND.	WATER TEMP DEG.C	HARDNESS TOTAL MG/L AS CaCO3
SAMPLE DATE YYMMDD	HOUR LMT	SAMPLE NUMBER	AS CR	AS CU	AS O	AS FE					
		MAXIMUM	0.0110	0.0020	13.9	88	0.8300	12.200	8.0	24.0	61.000
		ARITH MEAN	0.0060	0.0017	11.2	20	0.5383	3.928	7.4	8.1	37.833
		GEOM MEAN		0.0016	11.0		0.5139	2.726	7.4	3.6	36.221
		MINIMUM	0.0020	0.0010	7.8	4	0.3200	0.617	7.0	0.5	20.000
		STD DEV (GEOM *)		0.0005	2.2		0.1806	3.520	0.3	8.5	11.582
		# SAMP IN STATISTICS	3	6	12	11	6	12	12	12	12
		% SAMP (EXCLUDED)	50			8					
**INTERIM TEST-NAME:		MNUT	NIUT	PBUT	PH	PP04FR	PPUT	RSP	RST	TCMF COLIFORM	TCMFBK COLIFORM
		MANGANESE UNF.TOT. MG/L	NICKEL UNF.TOT. MG/L	LEAD UNF.TOT. MG/L	PH	P04 FIL. PEAC MG/L	PHOSPHOR UNF.TOT. MG/L	RESIDUE PARTIC. MG/L	RESIDUE TOTAL MG/L	TOTAL MF CNT /100ML	TOTAL MF BCKGRD CNT /100ML
SAMPLE DATE YYMMDD	HOUR LMT	SAMPLE NUMBER	AS MN	AS NI	AS PB	AS P	AS P				
830110	1220	10008	0.042	0.002 <	0.003<	7.30	0.001	0.011	1.00	100.00	10< 70AID
830214	1240	10022				7.30	0.001	0.010	1.00	70.00	10AID 80AID
830314	1340	10035				7.30	0.002	0.009	2.00	60.00	10< 280
830412	1430	10048	0.041	0.002 <	0.003<	7.40	0.001	0.017	2.00	75.00	160 1110
830517	1115	10070	0.014	0.002 <	0.003<	7.20	0.002	0.015	1.00	65.00	110 2000
830613	1410	10092				7.40	0.002	0.007	1.00	85.00	80AID 2000
830704	1110	10115	0.036	0.0020<	0.003<	7.50	0.003	0.012	3.00	90.00	800AID 5600
830815	1430	10138	0.092	0.002	0.003	7.90	0.001	0.011	1.00	100.00	200AID 10100
830920	1430	10162	0.140	0.002 <	0.003<	7.70	0.002	0.007	1.00	110.00	200AID 3500
831011	1020	10185				7.50	0.002	0.013	2.00	110.00	160 5000
831114	1350	10199				7.20	0.003	0.010	2.00	85.00	50AID 900
831212	1430	10212				6.90	0.004	0.011	3.00	95.00	50AID 400
		MAXIMUM	0.140	0.002	0.003	7.90	0.004	0.017	3.00	110.00	800 10100
		ARITH MEAN	0.061	0.002	0.003	7.38	0.002	0.011	1.67	87.08	182 2587
		GEOM MEAN	0.047			7.38	0.002	0.011	1.51	85.52	1079
		MINIMUM	0.014	0.002	0.003	6.90	0.001	0.007	1.00	60.00	10 70
		STD DEV (GEOM *)	0.046			0.26	0.001	0.003	0.78	16.85	5*
		# SAMP IN STATISTICS	6	1	1	12	12	12	12	12	12
		% SAMP (EXCLUDED)		83	83					16	

(CONTD)

1983 WATER QUALITY DATA REGION 6

87

B.O.W./ SITE: CURRENT RIVER
 SAMPLE POINT: AT CUMBERLAND STREET THUNDER BAY
 STATION TYPE: RIVER FLOW GAUGE FED 02AB015

STATION ID: 01-0104-001-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: CURRENT RIVER

STORET CODE: 02
 001
 7880

LAT: 48 27 19.18 LONG: 089 11 10.76 U T M: 16 0338350.0 5369000.0 4 REGION: 06 DISTANCE: 0.483

*INTERIM TEST-NAME:		TURB	ZNUT
			ZINC
SAMPLE			UNF.TOT.
DATE	HOUR	SAMPLE	TURB'ITY
YYMMDD	LMT	NUMBER	FTU
			MG/L
			AS ZN
830110	1220	10008	0.85
830214	1240	10022	0.80
830314	1340	10035	0.85
830412	1430	10048	1.40
830517	1115	10070	0.55
830613	1410	10092	0.65
830704	1110	10115	1.30
830815	1430	10138	1.40
830920	1430	10162	0.80
831011	1020	10185	2.40
831114	1350	10199	1.10
831212	1430	10212	1.20
MAXIMUM		2.40	0.0030
ARITH MEAN		1.11	0.0018
GEOM MEAN		1.02	
MINIMUM		0.55	0.0010
STD DEV (GEOM *)		0.50	
# SAMP IN STATISTICS		12	5
% SAMP (EXCLUDED)			16

1983 WATER QUALITY DATA REGION 6

88

B.O.W./ SITE: CURRENT RIVER
 SAMPLE POINT: AT HIGHWAYS 11 AND 17 THUNDER BAY
 STATION TYPE: RIVER

STATION ID: 01-0104-002-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: CURRENT RIVER

STORET CODE: 02
 001
 7880

LAT: 48 29 09.40 LONG: 089 11 05.75 U T M: 16 0338550.0 5372400.0 4 REGION: 06 DISTANCE: 2.897

*=INTERIM TEST-NAME:		FWSADP	FGPROJ	ALKT	ASUT	BOD5 BOD 5 DAY	CDUT	CLIDUR	COLAP	COND25	COALT
SAMPLE		SAMPLE	PROJECT	ALK	ARSENIC	TOT.DEM.	CADMIUM	CHLORIDE	COLOUR	CONDUCT.	COBALT
DATE	HOUR	DEPTH	SUB-PROJ	TOTAL	UNF.TOT.	MG/L	UNF.TOT.	UNF.REAC	APPARENT	25C	UNF.TOT.
YYMMDD	LMT	H	CODE	MG/L	MG/L	AS O	MG/L	MG/L	HZU	UMHO/CM	MG/L
				AS CAC03	AS AS		AS CD	AS CL-		AT 25 C	AS CO
830110	1240	10007	0101	28.0	0.0010<	0.40	0.0005<	1.900	93.000	80.0	0.0020<
830214	1230	10021	0101	32.0		0.60		2.100	88.000	88.0	
830314	1330	10034	0101	28.0		0.40		3.800	86.000	83.0	
830412	1440	10047	0101	33.0	0.0010<	0.60	0.0010	4.300	70.000	92.0	0.0020
830517	1100	10069	0101	16.0	0.0010<	0.40	0.0005<	1.300	84.000	47.0	0.0020<
830613	1220	10091	0101	21.0		0.60		1.700	86.000	56.0	
830704	1130	10114	0101	32.0	0.0010<	0.80	0.0005	2.400	80.000	80.0	0.0020<
830815	1445	10137	0101	41.0	0.0010<	0.30	0.0005	2.700	61.000	102.0	0.0020<
830920	1245	10161	0101	40.0	0.0010<	0.40	0.0005<	5.200	135.000	102.0	0.0020<
831011	1010	10184	0101	39.0		0.50		3.500	62.000	106.0	
831114	1400	10198	0101	23.0		0.50		2.100	79.000	69.0	
831212	1500	10211	0101	20.0		0.50		1.700	86.000	62.0	
		MAXIMUM	0.30	41.0		0.80	0.0010	5.200	135.000	106.0	0.0020
		ARITH MEAN	0.30	29.4		0.50	0.0007	2.725	84.167	80.6	0.0020
		GEOM MEAN		28.3		0.48		2.504	82.455	78.3	
		MINIMUM	0.30	16.0		0.30	0.0005	1.300	61.000	47.0	0.0020
		STD DEV (GEOM *)		8.3		0.13		1.208	18.973	19.0	
		# SAMP IN STATISTICS	12	12		12	3	12	12	12	1
		% SAMP (EXCLUDED)					50				83

*=INTERIM TEST-NAME:		CRUT	CUUT	DO	FCMF FECAL COLIFORM	FEUT	FWPH	FWSTRC	FWTEMP	HARDT	MNUT
SAMPLE		CHROMIUM	COPPER	DISSOLVED	COLIFORM	IRON				HARDNESS	MANGANESE
DATE	HOUR	UNF.TOT.	UNF.TOT.	OXYGEN	MF	UNF.TOT.				TOTAL	UNF.TOT.
YYMMDD	LMT	MG/L	MG/L	MG/L	CNT	MG/L	PH	STREAM	WATER	MG/L	MG/L
		AS CR	AS CU	AS O	/100ML	AS FE	FIELD	COND.	TEMP	AS CAC03	AS MN
830110	1240	0.0020<	0.0020	13.4	8	0.4300	7.15	4	0.1	34.000	0.014
830214	1230			13.0	4<		7.4	4	0.5	39.000	
830314	1330			10.6	4<		7.6		1.4	35.800	
830412	1440	0.0070	0.0040	14.0	8	0.6300	7.2	3	1.0	37.000	0.061
830517	1100	0.0020<	0.0010	11.9	4<	0.3600	7.1	8	6.0	18.000	0.015
830613	1220			9.5	16		7.2	8	17.5	25.000	
830704	1130	0.0020<	0.0020	9.4	252	0.3900	7.3		16.0	36.000	0.036
830815	1445	0.0120	0.0010	8.2	10AID	0.4600	7.7	8	23.5	49.000	0.026
830920	1245	0.0020	0.0100	9.9	8	0.4000	7.8	8	12.5	52.000	0.024
831011	1010			10.6	36		7.3	8	10.0	48.000	
831114	1400			13.6	4		7.4	8	1.0	30.000	
831212	1500			14.0	16		7.5	4	1.0	27.000	

(CONT'D)

1983 WATER QUALITY DATA REGION 6

89

B.O.W./ SITE: CURRENT RIVER
 SAMPLE POINT: AT HIGHWAYS 11 AND 17 THUNDER BAY
 STATION TYPE: RIVER

STATION ID: 01-0104-002-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: CURRENT RIVER

STORET CODE: 02
 001
 7880

LAT: 48 29 09.40 LONG: 089 11 05.75 U T M: 16 0338550.0 5372400.0 4 REGION: 06 DISTANCE: 2.897

*=INTERIM		TEST-NAME:	CRUT	CUUT	DO	FCMF	FEUT	FNPH	FWSTRC	FWTEMP	HARDT	MNUT
		CHROMIUM	COPPER	DISOLVED	FECAL	IRON					HARDNESS	MANGANESE
SAMPLE		UNF.TOT.	UNF.TOT.	OXYGEN	COLIFORM	UNF.TOT.				WATER	TOTAL	UNF.TOT.
DATE	HOUR	MG/L	MG/L	MG/L	MF	MG/L		PH	STREAM	TEMP	MG/L	MG/L
YYMMDD	LMT	AS CR	AS CU	AS O	CNT	AS FE		FIELD	COND.	DEG.C	AS CACO3	AS MN
		MAXIMUM	0.0120	0.0100	14.0	252	0.6300	7.8		23.5	52.000	0.061
		ARITH MEAN	0.0070	0.0033	11.5	40	0.4450	7.4		7.5	35.833	0.029
		GEOM MEAN		0.0023	11.3		0.4374	7.4		2.9	34.410	0.026
		MINIMUM	0.0020	0.0010	8.2	4	0.3600	7.1		0.1	18.000	0.014
		STD DEV (GEOM *)		0.0034	2.1		0.0969	0.2		8.1	10.205	0.017
		# SAMP IN STATISTICS	3	6	12	9	6	12		12	12	6
		% SAMP (EXCLUDED)	50			25						

*=INTERIM		TEST-NAME:	NIUT	PBUT	PH	PP04FR	PPUT	RSP	RST	TCMF	TCMFBK	TURB
		NICKEL	LEAD		P04	PHOSPHOR				COLIFORM	COLIFORM	
SAMPLE		UNF.TOT.	UNF.TOT.		FIL.REAC	UNF.TOT.	RESIDUE	RESIDUE	RESIDUE	TOTAL	TOTAL MF	TURB'ITY
DATE	HOUR	MG/L	MG/L	PH	MG/L	MG/L	PARTIC.	TOTAL	TOTAL	MF	BCKGRD	FTU
YYMMDD	LMT	AS NI	AS PB		AS P	AS P	MG/L	MG/L	MG/L	CNT	CNT	
										/100ML	/100ML	
830110	1240	10007	0.002 <	0.003<	7.30	0.001<	0.011	1.00	90.00	10AID	70AID	0.70
830214	1230	10021			7.40	0.001	0.010	1.00	75.00	30AID	110	0.75
830314	1330	10034			7.20	0.002	0.009	3.00	60.00	10AID	160	0.85
830412	1440	10047	0.002 <	0.003<	7.40	0.001	0.021	6.00	75.00	130	410	1.70
830517	1100	10069	0.002 <	0.003<	7.00	0.002	0.015	2.00	65.00	70AID	400	0.50
830613	1220	10091			7.30	0.001	0.007	1.00	70.00	110AID	1100	0.45
830704	1130	10114	0.0020<	0.003<	7.50	0.001	0.015	4.00	80.00	1300	8600	1.20
830815	1445	10137	0.002	0.008	7.90	0.001	0.009	2.00	120.00	200AID	7900	0.65
830920	1245	10161	0.002 <	0.003<	6.50	0.004	0.015	1.00	85.00	200	2800	7.10
831011	1010	10184			7.50	0.004	0.010	1.00	110.00	290	2000	0.95
831114	1400	10198			7.10	0.003	0.010	2.00	55.00	60AID	300	0.85
831212	1500	10211			6.90	0.003	0.010	1.00	100.00		500	0.60
		MAXIMUM	0.002	0.008	7.90	0.004	0.021	6.00	120.00	1300	8600	7.10
		ARITH MEAN	0.002	0.008	7.25	0.002	0.012	2.08	82.08	219	2029	1.36
		GEOM MEAN			7.24		0.011	1.70	79.95	89	695	0.94
		MINIMUM	0.002	0.008	6.50	0.001	0.007	1.00	55.00	10	70	0.45
		STD DEV (GEOM *)			0.35		0.004	1.56	19.94	4*	5*	1.84
		# SAMP IN STATISTICS	1	1	12	11	12	12	12	11	12	12
		% SAMP (EXCLUDED)	83	83		8						

(CONT'D)

II

1983 WATER QUALITY DATA REGION 6

90

B.O.W./ SITE: CURRENT RIVER
 SAMPLE POINT: AT HIGHWAYS 11 AND 17 THUNDER BAY
 STATION TYPE: RIVER

STATION ID: 01-0104-002-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: CURRENT RIVER

STORET CODE: 02
 001
 7880

LAT: 48 29 09.40 LONG: 089 11 05.75 U T M: 16 0338550.0 5372400.0 4 REGION: 06 DISTANCE: 2.897

*=INTERIM TEST-NAME: ZNUT
 ZINC
 UNF.TOT.
 SAMPLE
 DATE HOUR SAMPLE UNF.TOT.
 YYMMDD LMT NUMBER MG/L
 AS ZN

830110	1240	10007	0.0010
830412	1440	10047	0.0030
830517	1100	10069	0.0020
830704	1130	10114	0.0020
830815	1445	10137	0.0010
830920	1245	10161	0.0010
MAXIMUM			0.0030
ARITH MEAN			0.0017
GEOM MEAN			0.0015
MINIMUM			0.0010
STD DEV (GEOM *)			0.0008
# SAMP IN STATISTICS			6
% SAMP (EXCLUDED)			

1983 WATER QUALITY DATA REGION 6

91

B.O.W./ SITE: MC VICAR CREEK
 SAMPLE POINT: AT CUMBERLAND STREET THUNDER BAY
 STATION TYPE: RIVER

STATION ID: 01-0105-001-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: MC VICAR CREEK

STORET CODE: 02
 001
 7890

LAT: 48 26 23.78 LONG: 089 12 53.04

U T M: 16 0336200.0 5367350.0 4

REGION: 06

DISTANCE: 0.322

*=INTERIM TEST-NAME:		FWSADP	FGPROJ	ALKT	ASUT	BOD5	CDUT	CLIDUR	COLAP	COND25	COUT
						BOD 5 DAY					
							CADMIUM	CHLORIDE		CONDUCT.	COBALT
							UNF.TOT.	UNF.REAC	COLOUR	25C	UNF.TOT.
							MG/L	MG/L	APPARENT	UMHO/CM	MG/L
							AS CD	AS CL-	HZU	AT 25 C	AS CO
SAMPLE DATE YYMMDD	HOUR LMT	SAMPLE NUMBER	SAMPLE DEPTH M	PROJECT SUB-PROJ CODE	ALK TOTAL MG/L AS CACO3	ARSENIC UNF.TOT. MG/L AS AS	TOT.DEM. MG/L AS O				
830110	1205	10009	0.30	0101	102.0	0.0010<	0.40	0.0005<	76.000	38.000	0.0020<
830214	1250	10023	0.30	0101	109.0		3.40		373.000	1455.0	
830314	1350	10036	0.30	0101	77.0		0.80		39.000	61.000	304.0
830412	1330	10049	0.30	0101	73.0	0.0010<	0.90	0.0020	19.000	48.000	0.0020
830517	1120	10071	0.30	0101	70.0	0.0010<	0.30	0.0005<	13.000	45.000	0.0020
830613	1350	10093	0.30	0101	79.0		0.60		14.000	60.000	221.0
830704	1100	10118	0.30	0101	72.0	0.0010<	1.20	0.0010	13.000	70.000	0.0020<
830815	1415	10139	0.30	0101	133.0	0.0010<	0.20	0.0005	23.000	65.000	0.0020<
830920	1340	10163	0.30	0101	53.0	0.0010<	0.50	0.0005<	4.100	69.000	0.0020<
831011	1040	10186	0.30	0101	62.0		1.30		23.000	40.000	226.0
831114	1235	10200	0.30	0101	101.0		2.20		48.000	52.000	386.0
831212	1405	10213	0.30	0101	97.0		0.20		19.000	41.000	281.0
MAXIMUM			0.30		133.0		3.40	0.0020	373.000	70.000	0.0020
ARITH MEAN			0.30		85.7		1.00	0.0012	55.342	53.545	0.0020
GEOM MEAN					83.0		0.69		26.064	52.321	295.0
MINIMUM			0.30		53.0		0.20	0.0005	4.100	38.000	0.0020
STD DEV (GEOM *)					22.9		0.95		101.939	11.945	355.2
# SAMP IN STATISTICS			12		12		12	3	12	11	12
% SAMP (EXCLUDED)								50			66
*=INTERIM TEST-NAME:		CRUT	CUUT	DO	FCMF	FEUT	FMPH	FWSTRC	FWTEMP	HARDT	MNUT
					FECAL						
					COLIFORM	IRON					
					MF	UNF.TOT.					
					CNT	MG/L					
					/100ML	AS FE					
SAMPLE DATE YYMMDD	HOUR LMT	SAMPLE NUMBER	CHROMIUM UNF.TOT. MG/L AS CR	COPPER UNF.TOT. MG/L AS CU	DISOLVED OXYGEN MG/L AS O		PH FIELD	STREAM COND.	WATER TEMP DEG.C	HARDNESS TOTAL MG/L AS CACO3	MANGANESE UNF.TOT. MG/L AS MN
830110	1205	10009	0.0020<	0.0030	12.8	4<	0.8000	7.55	4	0.3	0.088
830214	1250	10023			13.2	56		7.5	4	0.5	185.000
830314	1350	10036			10.7	32		7.8		1.3	102.000
830412	1330	10049	0.0070	0.0050	13.8	8	3.1000	7.6	3	1.0	84.000
830517	1120	10071	0.0020	0.0020	12.5	12	0.4600	7.5	8	3.0	88.000
830613	1350	10093			10.0	20		7.8	8	15.0	100.000
830704	1100	10118	0.0040	0.0090	9.6	1500>	3.2000	7.4	3	16.0	86.000
830815	1415	10139	0.0020<	0.0030	8.6	60AID	0.7600	8.2	8	21.0	167.000
830920	1340	10163	0.0020	0.0020	10.2	28	0.6700	8.2	8	12.0	62.000
831011	1040	10186			10.2	600>		7.1	3	11.0	84.000
831114	1235	10200			13.6	10<		7.7	8	0.5	135.000
831212	1405	10213			13.1	64		7.7	4	1.0	125.000

(CONTD)

1983 WATER QUALITY DATA REGION 6

92

B.O.W./ SITE: MC VICAR CREEK
 SAMPLE POINT: AT CUMBERLAND STREET THUNDER BAY
 STATION TYPE: RIVER

STATION ID: 01-0105-001-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: MC VICAR CREEK

STORET CODE: 02
 001
 7890

LAT: 48 26 23.78 LONG: 089 12 53.04

U T M: 16 0336200.0 5367350.0 4

REGION: 06

DISTANCE: 0.322

*INTERIM		TEST-NAME:	CRUT	CUUT	DO	FCMF	FEUT	FMPH	FWSTRC	FWTEMP	HARDT	MINUT
			CHROMIUM	COPPER	DISSOLVED	FECAL	IRON				HARDNESS	MANGANESE
SAMPLE			UNF.TOT.	UNF.TOT.	OXYGEN	COLIFORM	UNF.TOT.			WATER	TOTAL	UNF.TOT.
DATE	HOUR	SAMPLE	MG/L	MG/L	MG/L	MF	MG/L	PH	STREAM	TEMP	MG/L	MG/L
YYMMDD	LMT	NUMBER	AS CR	AS CU	AS O	/100ML	AS FE	FIELD	COND.	DEG.C	AS CAC03	AS MN
		MAXIMUM	0.0070	0.0090	13.8	64	3.2000	8.2		21.0	185.000	0.210
		ARITH MEAN	0.0037	0.0040	11.5	35	1.4983	7.7		6.9	111.833	0.101
		GEOM MEAN		0.0034	11.4		1.1089	7.7		2.8	106.723	0.076
		MINIMUM	0.0020	0.0020	8.6	8	0.4600	7.1		0.3	62.000	0.031
		STD DEV (GEOM *)		0.0027	1.8		1.2852	0.3		7.6	36.630	0.080
		# SAMP IN STATISTICS	4	6	12	8	6	12		12	12	6
		% SAMP (EXCLUDED)	33			33						
*INTERIM		TEST-NAME:	NIUT	PBUT	PH	PP04FR	PPUT	RSP	RST	TCMF	TCMFBK	TURB
			NICKEL	LEAD		P04	PHOSPHOR			COLIFORM	COLIFORM	
SAMPLE			UNF.TOT.	UNF.TOT.		FIL.REAC	UNF.TOT.	RESIDUE	RESIDUE	TOTAL	TOTAL MF	
DATE	HOUR	SAMPLE	MG/L	MG/L	PH	MG/L	MG/L	PARTIC.	TOTAL	MF	BCKGRD	TURB'ITY
YYMMDD	LMT	NUMBER	AS NI	AS PB		AS P	AS P	MG/L	MG/L	/100ML	/100ML	FTU
830110	1205	10009	0.002 <	0.003<	7.80	0.002	0.012	5.00	280.00	170	480	4.20
830214	1250	10023			7.80	0.004	0.042	5.00	830.00	1180	1310	22.00
830314	1350	10036			7.70	0.007	0.032	15.00	220.00	510	1660	4.10
830412	1330	10049	0.002 <	0.009	7.80	0.003	0.074	65.00	210.00	210	590	5.80
830517	1120	10071	0.002 <	0.003<	7.90	0.003	0.015	3.00	110.00	100AID	3500	0.95
830613	1350	10093			8.00	0.002	0.008	3.00	160.00	300C	8800	0.95
830704	1100	10118	0.0040	0.003<	7.80	0.004	0.077	60.00	240.00	9100C	90000	6.10
830815	1415	10139	0.007	0.011	8.30	0.003	0.014	1.00	260.00	1000	29000	1.70
830920	1340	10163	0.002 <	0.003<	7.80	0.002	0.010	1.00	95.00	2100	9100	3.60
831011	1040	10186			7.60	0.006	0.075	40.00	190.00	15000	80000	7.80
831114	1235	10200			7.90	0.005	0.013	6.00	260.00	1100	4000	3.40
831212	1405	10213			7.50	0.006	0.013	3.00	210.00	10000	31000	1.60
		MAXIMUM	0.007	0.011	8.30	0.007	0.077	65.00	830.00	15000	90000	22.00
		ARITH MEAN	0.005	0.010	7.82	0.004	0.032	18.92	255.42	3397	21620	5.18
		GEOM MEAN			7.82	0.004	0.023	7.76	218.16	1061	6371	3.48
		MINIMUM	0.0040	0.009	7.50	0.002	0.008	1.00	95.00	100	480	0.95
		STD DEV (GEOM *)			0.20	0.002	0.028	23.49	189.90	5*	6*	5.72
		# SAMP IN STATISTICS	2	2	12	12	12	12	12	12	12	12
		% SAMP (EXCLUDED)	66	66								

(C O N T D)

1983 WATER QUALITY DATA REGION 6

93

B.O.W./ SITE: MC VICAR CREEK
 SAMPLE POINT: AT CUMBERLAND STREET THUNDER BAY
 STATION TYPE: RIVER

STATION ID: 01-0105-001-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: MC VICAR CREEK

STORET CODE: 02
 001
 7890

LAT: 48 26 23.78 LONG: 089 12 53.04

U T M: 16 0336200.0 5367350.0 4

REGION: 06

DISTANCE: 0.322

*=INTERIM TEST-NAME: ZNUT
 ZINC
 SAMPLE UNF.TOT.
 DATE HOUR SAMPLE MG/L
 YYMMDD LMT NUMBER AS ZN

830110	1205	10009	0.0110
830412	1330	10049	0.0200
830517	1120	10071	0.0060
830704	1100	10118	0.0200
830815	1415	10139	0.0050
830920	1340	10163	0.0040

MAXIMUM 0.0200
 ARITH MEAN 0.0110
 GEOM MEAN 0.0090
 MINIMUM 0.0040
 STD DEV (GEOM *) 0.0074
 # SAMP IN STATISTICS 6
 % SAMP (EXCLUDED)

1983 WATER QUALITY DATA REGION 6

94

B.O.W./ SITE: MC INTYRE RIVER
 SAMPLE POINT: AT HAMMOND AVE THUNDER BAY
 STATION TYPE: RIVER FLOW GAUGE FED 02AB016

STATION ID: 01-0106-001-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: MC INTYRE RIVER

STORET CODE: 02
 001
 7900

				LAT: 48 24 34.10		LONG: 089 13 53.95		U T M: 16 0334850.0 5364000.0 4		REGION: 06		DISTANCE: 0.966											
*=INTERIM		TEST-NAME:		FWSADP		FGPROJ		ALKT		ASUT		BOD5		CCNAUR		CCNFUR		CDUT		CLIDUR		COND25	
								ALK		ARSENIC		BOD		CYANIDE		CYANIDE		CADMIUM		CHLORIDE		CONDUCT.	
SAMPLE				SAMPLE		PROJECT		TOTAL		UNF. TOT.		5 DAY		UNF. REAC		UNF. REAC		UNF. TOT.		UNF. REAC		25C	
DATE		HOUR		DEPTH		SUB-PROJ		MG/L		MG/L		MG/L		MG/L		MG/L		MG/L		MG/L		UMHO/CM	
YYMMDD		LMT		M		CODE		AS CAC03		AS AS		AS O		AS HCN		AS HCN		AS CD		AS CL-		AT 25 C	
830110		1150		10011		0.30		0101		83.0		0.0010		0.60		0.001<W		0.001<W		0.0024		246.0	
830214		1310		10024		0.30		0101		107.0		0.0010<		0.70				0.0011		24.000		307.0	
830314		1410		10038		0.30		0101		64.0		0.0010		2.00				0.0010		22.000		233.0	
		MAXIMUM		0.30				107.0		0.0010		2.00		0.001		0.001		0.0024		24.000		307.0	
		ARITH MEAN		0.30				84.7		0.0010		1.10		0.001<A		0.001<A		0.0015		21.333		262.0	
		GEOM MEAN						82.8				0.94						0.0014		21.182		260.1	
		MINIMUM		0.30				64.0		0.0010		0.60		0.001		0.001		0.0010		18.000		233.0	
		STD DEV (GEOM *)						21.5				0.78						0.0008		3.055		39.5	
		# SAMP IN STATISTICS		3				3		2		3		1		1		3		3		3	
		% SAMP (EXCLUDED)								33													
*=INTERIM		TEST-NAME:		COUT		CRUT		CUUT		DO		FCHF		FEUT		FWFLOW		FWPH		FWSTRC		FWTEHP	
												FECAL											
				COBALT		CHROMIUM		COPPER		DISOLVED		COLIFORM		IRON		STREAM						WATER	
				UNF. TOT.		UNF. TOT.		UNF. TOT.		OXYGEN		HF		UNF. TOT.		FLOW						TEMP	
				MG/L		MG/L		MG/L		MG/L		CNT		MG/L		M3		PH		STREAM		DEG.C	
				AS CO		AS CR		AS CU		AS O		/100ML		AS FE		/S		FIELD		COND.			
830110		1150		10011		0.0030		0.0150		0.0180		11.8		420		9.900		0.170		7.0		4	
830214		1310		10024		0.0030		0.0020		0.0080		10.5		1000		8.2000		0.131		7.2		4	
830314		1410		10038		0.0030		0.0090		0.0100		9.4		480		6.7000		0.588		7.3		4	
		MAXIMUM		0.0030		0.0150		0.0180		11.8		1000		9.900		0.588		7.3				1.2	
		ARITH MEAN		0.0030		0.0087		0.0120		10.6		633		8.267		0.296		7.2				0.6	
		GEOM MEAN		0.0030		0.0065		0.0113		10.5		586		8.163		0.236		7.2				0.4	
		MINIMUM		0.0030		0.0020		0.0080		9.4		420		6.7000		0.131		7.0				0.1	
		STD DEV (GEOM *)		0.0000		0.0065		0.0053		1.2		2*		1.601		0.253		0.2				0.6	
		# SAMP IN STATISTICS		2		3		3		3		3		3		3		3				3	
		% SAMP (EXCLUDED)																					

(C O N T D)

STORET CODE: 02
001
7900

[illegible][illegible]

1983 WATER QUALITY DATA REGION 6

96

B.O.W./ SITE: MC INTYRE RIVER
 SAMPLE POINT: HIGHWAY 11 & 17 CITY OF THUNDER BAY
 STATION TYPE: RIVER

STATION ID: 01-0106-002-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: MC INTYRE RIVER

STORET CODE: 02
 001
 7900

LAT: 48 23 59.74 LONG: 089 14 53.25

U T M: 16 0333600.0 5362975.0 4

REGION: 06

DISTANCE: 1.931

*=INTERIM		TEST-NAME:	FWSADP	FGPROJ	ALKT	ASUT	BOD5	CCNAUR	CCNFUR	CDUT	CLIDUR	COLAP
					ALK	ARSENIC	BOD	CYANIDE	CYANIDE			
					TOTAL	UNF.TOT.	5 DAY	AVAIL	FREE	CADMIUM	CHLORIDE	
SAMPLE			SAMPLE	PROJECT	MG/L	MG/L	TOT.DEM.	UNF.REAC	UNF.REAC	UNF.TOT.	UNF.REAC	COLOUR
DATE	HR	SAMPLE	DEPTH	SUB-PROJ	AS CAC03	AS AS	AS O	AS HCN	AS HCN	AS CD	AS CL-	APPARENT
YYMMDD	LMT	NUMBER	M	CODE								HZU
830110	1315	10010	0.30	0101	77.0	0.0010<	0.20	0.001<W	0.001<W	0.0005<	7.000	53.000
830214		10025	0.30	0101	83.0		0.60				6.800	47.000
830314	1310	10037	0.30	0101	66.0		0.30				22.000	58.000
830412	1500	10050	0.30	0101	60.0	0.0010<	1.00	0.001<W	0.001<W	0.0020	15.000	56.000
830517	1015	10072	0.30	0101	47.0	0.0010<	0.30	0.001<W	0.001<W	0.0005<	6.700	70.000
830613	1435	10094	0.30	0101	55.0		0.90				7.400	86.000
830704	1145	10116	0.30	0101	70.0	0.0010<	0.80	0.001<W	0.001<W	0.0010	11.000	95.000
830815	1500	10140	0.30	0101	90.0	0.0010<	0.40			0.0010	11.000	85.000
830920	1120	10164	0.30	0101	132.0	0.0010<	0.20	0.001<T	0.001<W	0.0005<	25.000	58.000
831011	1050	10187	0.30	0101	75.0		0.70				13.000	93.000
831114	1430	10201	0.30	0101	69.0		0.60				11.000	69.000
831212	1520	10214	0.30	0101	64.0		0.30				10.000	62.000
MAXIMUM			0.30		132.0		1.00	0.001	0.001	0.0020	25.000	95.000
ARITH MEAN			0.30		74.0		0.52	0.001<A	0.001<A	0.0013	12.158	69.333
GEOM MEAN					71.6		0.45	0.001<A	0.001<A		11.065	67.581
MINIMUM			0.30		47.0		0.20	0.001	0.001	0.0010	6.700	47.000
STD DEV (GEOM *)					21.7		0.28	0.000<A	0.000<A		5.931	16.505
# SAMP IN STATISTICS			12		12		12	5	5	3	12	12
% SAMP (EXCLUDED)										50		

*=INTERIM TEST-NAME:		COND25	COUT	CRUT	CUUT	DO	FCMF	FEUT	FWPH	FWSTRC	FWTEMP
							FECAL				
							COLIFORM	IRON			
							MF	UNF. TOT.			
							CNT	MG/L			
							/100ML	AS FE			
SAMPLE		CONDUCT.	COBALT	CHROMIUM	COPPER	DISOLVED					
DATE	HR	25C	UNF. TOT.	UNF. TOT.	UNF. TOT.	OXYGEN					
YYMMDD	LMT	UMHO/CH	MG/L	MG/L	MG/L	MG/L					
		AT 25 C	AS CO	AS CR	AS CU	AS O					
830110	1315	195.0	0.0020<	0.0020<	0.0010	13.3	8	0.690	7.3	4	0.5
830214		206.0				13.1	16		7.5	4	0.5
830314	1310	226.0				10.0	68	0.5000	7.4		1.3
830412	1500	182.0	0.0020	0.0040	0.0020	13.8	24	2.400	7.4	3	1.0
830517	1015	10072	0.0030	0.0020<	0.0010	12.8	4<	0.5000	7.5	8	3.5
830613	1435	10094				9.5	40	0.2900	7.6	8	17.5
830704	1145	10116	0.0020<	0.0050	0.0040	9.8	1500>	2.3000	7.1	3	14.0
830815	1500	10140	0.0020<	0.0110	0.0020	8.5	20AID	0.5700	8.4	8	23.5
830920	1120	10164	0.0020<	0.0030	0.0010	10.7	84	0.5900	8.2	8	11.0
831011	1050	10187				10.7	600>	1.5000	7.6	3	9.5
831114	1430	10201				13.8	10<	0.5500	7.6	8	0.5
831212	1520	10214				13.0	36	0.4000	7.0	4	1.0

(C O N T D)

1983 WATER QUALITY DATA REGION 6

97

B.O.W./ SITE: MC INTYRE RIVER
 SAMPLE POINT: HIGHWAY 11 & 17 CITY OF THUNDER BAY
 STATION TYPE: RIVER

STATION ID: 01-0106-002-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: MC INTYRE RIVER

STORET CODE: 02
 001
 7900

LAT: 48 23 59.74 LONG: 089 14 53.25 U T M: 16 0333600.0 5362975.0 4 REGION: 06 DISTANCE: 1.931

*=INTERIM	TEST-NAME:	COND25	COU	CRUT	CUUT	DO	FCMF	FEUT	FVPH	FWSTRC	FWTEMP
		CONDUCT.	COBALT	CHROMIUM	COPPER	DISOLVED	FECAL	IRON			
SAMPLE		25C	UNF.TOT.	UNF.TOT.	UNF.TOT.	OXYGEN	COLIFORM	UNF.TOT.			
DATE	HR	UMHO/CM	MG/L	MG/L	MG/L	MG/L	MF	MG/L	PH	STREAM	WATER
YYMMDD	LMT	AT 25 C	AS CO	AS CR	AS CU	AS O	CNT	AS FE	FIELD	COND.	TEMP
							/100ML				DEG.C

	MAXIMUM	338.0	0.0030	0.0110	0.0040	13.8	84	2.400	8.4		23.5
	ARITH MEAN	200.5	0.0025	0.0057	0.0018	11.6	37	0.935	7.5		7.0
	GEOM MEAN	195.1			0.0016	11.4		0.728	7.5		2.9
	MINIMUM	130.0	0.0020	0.0030	0.0010	8.5	8	0.2900	7.0		0.5
	STD DEV (GEOM *)	51.8			0.0012	1.9		0.766	0.4		8.0
	* SAMP IN STATISTICS	12	2	4	6	12	8	11	12		12
	% SAMP (EXCLUDED)		66	33			33				

*=INTERIM	TEST-NAME:	HARDT	MNUT	NIUT	NNHTFR	NN02FR	NN03FR	NNTKUR	PEUT	PH	PP04FR
		HARDNESS	MANGANESE	NICKEL	NH3-N	NO2-N	NO3-N	K'DAHL N	LEAD		P04
SAMPLE		TOTAL	UNF.TOT.	UNF.TOT.	TOTAL	FIL.REAC	FIL.REAC	FIL.REAC	UNF.REAC	UNF.TOT.	FIL.REAC
DATE	HR	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
YYMMDD	LMT	AS CACO3	AS MN	AS NI	AS N	AS N	AS N	AS N	AS N	AS PB	AS P

830110	1315	10010	88.000	0.023	0.002 <	0.030	0.003	0.250	0.330	0.003<	7.60	0.004
830214		10025	97.000			0.020	0.004	0.310	0.280		7.70	0.005
830314	1310	10037	86.000			0.050	0.005	0.510	0.420		7.40	0.004
830412	1500	10050	71.000	0.021	0.002 <	0.070	0.005	0.260	0.660	0.003	7.30	0.004
830517	1015	10072	53.000	0.029	0.002 <	0.010<	0.004	0.140	0.430	0.003<	7.60	0.004
830613	1435	10094	65.000	0.014		0.010<	0.005	0.040	0.430		7.50	0.002
830704	1145	10116	83.000	0.150	0.0020<	0.020	0.005	0.090	0.700	0.003<	7.70	0.005
830815	1500	10140	103.000	0.021	0.002	0.010	0.003	0.020	0.490	0.005	8.30	0.003
830920	1120	10164	165.000	0.029	0.002 <	0.010<	0.004	0.330	0.400	0.003<	8.20	0.004
831011	1050	10187	96.000	0.160		0.020	0.005	0.090	0.620		7.60	0.006
831114	1430	10201	83.000	0.030		0.010<	0.001<	0.110	0.390		7.70	0.005
831212	1520	10214	82.000	0.017		0.010	0.003	0.240	0.440		7.10	0.004
	MAXIMUM	165.000	0.160	0.002	0.070	0.005	0.510	0.700	0.005	8.30	0.006	
	ARITH MEAN	89.333	0.049	0.002	0.029	0.004	0.199	0.466	0.004	7.64	0.004	
	GEOM MEAN	86.079	0.033				0.144	0.450		7.63	0.004	
	MINIMUM	53.000	0.014	0.002	0.010	0.003	0.020	0.280	0.003	7.10	0.002	
	STD DEV (GEOM *)	27.652	0.056				0.144	0.130		0.34	0.001	
	* SAMP IN STATISTICS	12	10	1	8	11	12	12	2	12	12	
	% SAMP (EXCLUDED)			83	33	8			66			

(C O N T D)

1983 WATER QUALITY DATA REGION 6

98

B.O.W./ SITE: MC INTYRE RIVER
 SAMPLE POINT: HIGHWAY 11 & 17 CITY OF THUNDER BAY
 STATION TYPE: RIVER

STATION ID: 01-0106-002-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: MC INTYRE RIVER

STORET CODE: 02
 001
 7900

LAT: 48 23 59.74 LONG: 089 14 53.25

U T M: 16 0333600.0 5362975.0 4

REGION: 06

DISTANCE: 1.931

*=INTERIM	TEST-NAME:	PPUT	P1PCBT	RSP	RST	TCMF COLIFORM TOTAL MF CNT /100ML	TCMFBK COLIFORM TOTAL MF BCKGRD CNT /100ML	TURB TURB'ITY FTU	ZNUT ZINC UNF.TOT. MG/L AS ZN
SAMPLE DATE YYMMDD	HOUR LMT	SAMPLE NUMBER	PHOSPHOR UNF.TOT. MG/L AS P	PCB TOTAL NG/L	RESIDUE PARTIC. MG/L	RESIDUE TOTAL MG/L			
830110	1315	10010	0.014		2.00	140.00	400AID	2400	3.10
830214		10025	0.013	20<W	1.00	140.00	80AID	390	2.80
830314	1310	10037	0.015		3.00	160.00	100	720	2.10
830412	1500	10050	0.065		30.00	150.00	230	410	7.30
830517	1015	10072	0.019		4.00	110.00	110	440	2.10
830613	1435	10094	0.011		3.00	140.00	230C	5000	1.40
830704	1145	10116	0.058		40.00	210.00	4800C	50000	4.40
830815	1500	10140	0.014		1.00	180.00	3400	22000	1.90
830920	1120	10164	0.013		1.00	220.00	400AID	6600	2.90
831011	1050	10187	0.035		15.00	210.00	2900	20000	3.20
831114	1430	10201	0.011		5.00	150.00	90AID	700	2.10
831212	1520	10214	0.013		1.00	150.00	30AID	1100	2.20
		MAXIMUM	0.065	20	40.00	220.00	4800	50000	7.30
		ARITH MEAN	0.023	20<A	8.83	163.33	1064	9147	2.96
		GEOM MEAN	0.019		3.70	160.15	315	2527	2.68
		MINIMUM	0.011	20	1.00	110.00	30	390	1.40
		STD DEV (GEOM *)	0.019		12.99	34.20	5*	6*	1.58
		# SAMP IN STATISTICS	12	1	12	12	12	12	6
		% SAMP (EXCLUDED)							

B.O.W./ SITE: NEEBING RIVER
SAMPLE POINT: HWYS.11&17 WEST OF MAPLEWOOD SIDE ROAD
STATION TYPE: RIVER

STATION ID: 01-0107-002-02

MAJOR BASIN: GREAT LAKES
MINOR BASIN: LAKE SUPERIOR
TERM STREAM: NEEBING RIVER

STORET CODE: 02
001
7910

LAT: 48 22 54.32 LONG: 089 21 29.07

U T M: 16 0325400.0 5361200.0 4

REGION: 06

DISTANCE: 13.840

*INTERIM		TEST-NAME:	FWSADP	FGPROJ	ALKT	ASUT	BOD5	CCNAUR	CCNFUR	CDUT	CLIDUR	COLAP
					ALK	ARSENIC	BOD	CYANIDE	CYANIDE			
					TOTAL	UNF. TOT.	5 DAY	AVAIL	FREE	CADMIUM	CHLORIDE	
SAMPLE			SAMPLE	PROJECT	MG/L	MG/L	TOT. DEM.	UNF. REAC	UNF. REAC	UNF. TOT.	UNF. REAC	COLOUR
DATE	HOUR	SAMPLE	DEPTH	SUB-PROJ	AS	AS	MG/L	MG/L	MG/L	MG/L	MG/L	APPEARANT
YYMMDD	LMT	NUMBER	M	CODE	AS	AS	AS	AS	AS	AS	AS	HZU
830110	1420	10012	0.30	0101	109.0	0.0010<	0.20	0.001<T	0.001<W	0.0005<	11.000	63.000
830214	1130	10026	0.30	0101	116.0		0.40				14.000	59.000
830314	1145	10039	0.30	0101	71.0		1.10				11.000	77.000
830412	1140	10051	0.30	0101	65.0	0.0010<	1.50	0.001<W	0.001<W	0.0010	8.600	63.000
830517	0950	10074	0.30	0101	74.0	0.0010<	0.50	0.001<W	0.001<W	0.0005<	8.300	57.000
830613	1450	10095	0.30	0101	42.0		0.90				8.000	79.000
830704	1200	10117	0.30	0101	99.0	0.0010<	0.80	0.001<W	0.001<W	0.0005	7.700	94.000
830815	1515	10141	0.30	0101	123.0	0.0010	0.50			0.0010	10.000	75.000
830920	1140	10165	0.30	0101	88.0	0.0010<	0.40	0.001<T	0.001<W	0.0005<	11.000	78.000
831011	1105	10188	0.30	0101	102.0		0.40				20.000	75.000
831114	1445	10202	0.30	0101	92.0		0.40				12.000	53.000
831212	1530	10215	0.30	0101	90.0		0.20				23.000	49.000
MAXIMUM			0.30		123.0	0.0010	1.50	0.001	0.001	0.0010	23.000	94.000
ARITH MEAN			0.30		89.2	0.0010	0.61	0.001<A	0.001<A	0.0008	12.050	68.500
GEOM MEAN					86.0		0.51	0.001<A	0.001<A		11.340	67.341
MINIMUM			0.30		42.0	0.0010	0.20	0.001	0.001	0.0005	7.700	49.000
STD DEV (GEOM *)					23.2		0.39	0.000<A	0.000<A		4.821	13.181
# SAMP IN STATISTICS			12		12	1	12	5	5	3	12	12
% SAMP (EXCLUDED)						83				50		

*=INTERIM	TEST-NAME:	COND25	COUT	CRUT	CUUT	DO	FCMF	FEUT	FVPH	FWSTRC	FWTEMP	
SAMPLE		CONDUCT.	COBALT	CHROMIUM	COPPER	DISOLVED	FCOLIFORM	IRON				
DATE	HOUR	25C	UNF.TOT.	UNF.TOT.	UNF.TOT.	OXYGEN	MF	UNF.TOT.			WATER	
YYMMDD	LMT	UMHO/CH	MG/L	MG/L	MG/L	MG/L	CNT	MG/L	PH	STREAM	TEMP	
		AT 25 C	AS CO	AS CR	AS CU	AS O	/100ML	AS FE	FIELD	COND.	DEG.C	
830110	1420	10012	269.0	0.0020<	0.0020<	0.0040	12.8	4	1.000	7.5	4	0.5
830214	1130	10026	289.0				12.1	32		7.4	4	0.5
830314	1145	10039	203.0				10.2	28	0.8000	7.4		1.2
830412	1140	10051	168.0	0.0030	0.0070	0.0060	13.8	28	5.000	7.3		0.5
830517	0950	10074	191.0	0.0020	0.0020<	0.0020	12.4	16	0.5800	7.7	8	4.0
830613	1450	10095	197.0				9.8	12	0.4000	7.6	8	17.5
830704	1200	10117	206.0	0.0020<	0.0030	0.0030	9.4	650	2.5000	7.5	8	15.0
830815	1515	10141	275.0	0.0020<	0.0150	0.0050	8.4	20AID	1.3000	7.8	8	24.0
830920	1140	10165	215.0	0.0020<	0.0020<	0.0020	10.7	100	1.1000	7.9	8	11.5
831011	1105	10188	280.0				10.2	44	1.0000	7.7	8	10.0
831114	1445	10202	241.0				12.2	16	0.6000	7.6	8 4	1.0
831212	1530	10215	242.0				12.4	4	0.6100	7.1	4	1.0

(C O N T D)

1983 WATER QUALITY DATA REGION 6

100

B.O.W./ SITE: NEEBING RIVER
 SAMPLE POINT: HWYS.11&17 WEST OF MAPLEWOOD SIDE ROAD
 STATION TYPE: RIVER

STATION ID: 01-0107-002-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: NEEBING RIVER

STORET CODE: 02
 001
 7910

LAT: 48 22 54.32 LONG: 089 21 29.07

U T M: 16 0325400.0 5361200.0 4

REGION: 06

DISTANCE: 13.840

*=INTERIM	TEST-NAME:	COND25	COUT	CRUT	CUUT	DO	FCMF FECAL COLIFORM	FEUT	FWPH	FWSTRC	FWTEMP
SAMPLE DATE YYMMDD	HOUR LMT	SAMPLE NUMBER	CONDUCT. 25C UMHO/CM AT 25 C	COBALT UNF.TOT. MG/L AS CO	CHROMIUM UNF.TOT. MG/L AS CR	COPPER UNF.TOT. MG/L AS CU	DISOLVED OXYGEN MG/L AS O	IRON UNF.TOT. MG/L AS FE	PH FIELD	STREAM COND.	WATER TEMP DEG.C

			MAXIMUM	289.0	0.0030	0.0150	0.0060	13.8	650	5.000	7.9	24.0
			ARITH MEAN	231.3	0.0025	0.0083	0.0037	11.2	79	1.354	7.5	7.2
			GEOM MEAN	228.1			0.0034	11.1	25	1.018	7.5	3.0
			MINIMUM	168.0	0.0020	0.0030	0.0020	8.4	4	0.4000	7.1	0.5
			STD DEV (GEOM *)	40.2			0.0016	1.6	4*	1.337	0.2	8.2
			# SAMP IN STATISTICS	12	2	3	6	12	12	11	12	12
			% SAMP (EXCLUDED)		66	50						

*=INTERIM	TEST-NAME:	HARDT	MNUT	NIUT	NNHTFR NH3-N TOTAL	NNO2FR NO2-N FIL.REAC	NNO3FR NO3-N FIL.REAC	NNTKUR K'DAHL N TOTAL	PBUT	PH	PP04FR P04 FIL.REAC	
SAMPLE DATE YYMMDD	HOUR LMT	SAMPLE NUMBER	HARDNESS TOTAL MG/L AS CACO3	MANGANESE UNF.TOT. MG/L AS MN	NICKEL UNF.TOT. MG/L AS NI	FIL.REAC MG/L AS N	FIL.REAC MG/L AS N	FIL.REAC MG/L AS N	UNF.REAC MG/L AS N	UNF.TOT. MG/L AS PB	PH	AS P

830110	1420	10012	125.000	0.045	0.002 <	0.050	0.004	0.360	0.430	0.003<	7.70	0.003
830214	1130	10026	139.000			0.040	0.004	0.450	0.350		7.70	0.004
830314	1145	10039	86.000			0.270	0.014	0.640	0.850		7.40	0.013
830412	1140	10051	65.000	0.240	0.002	0.160	0.006	0.220	0.860	0.003<	7.50	0.006
830517	0950	10074	90.000	0.029	0.002 <	0.010	0.004	0.090	0.420	0.003<	7.80	0.002
830613	1450	10095	96.000	0.019		0.010<	0.005	0.050	0.510		7.90	0.002
830704	1200	10117	111.000	0.130	0.0020<	0.030	0.006	0.090	0.780	0.003<	7.80	0.005
830815	1515	10141	143.000	0.063	0.006	0.030	0.003	0.040	0.670	0.007	7.90	0.002
830920	1140	10165	105.000	0.054	0.002 <	0.010<	0.003	0.020	0.430	0.003<	7.90	0.003
831011	1105	10188	127.000	0.040		0.030	0.004	0.110	0.550		7.70	0.005
831114	1445	10202	115.000	0.035		0.010<	0.001<	0.130	0.450		7.80	0.004
831212	1530	10215	114.000	0.050		0.010	0.003	0.280	0.450		7.40	0.003

			MAXIMUM	143.000	0.240	0.006	0.270	0.014	0.640	0.860	0.007	7.90	0.013
			ARITH MEAN	109.667	0.070	0.004	0.070	0.005	0.207	0.562	0.007	7.71	0.004
			GEOM MEAN	107.298	0.053			0.133	0.538		7.71	0.004	
			MINIMUM	65.000	0.019	0.002	0.010	0.003	0.020	0.350	0.007	7.40	0.002
			STD DEV (GEOM *)	22.777	0.067			0.192	0.181		0.18	0.003	
			# SAMP IN STATISTICS	12	10	2	9	11	12	12	1	12	12
			% SAMP (EXCLUDED)			66	25	8			83		

(C O N T D)

1983 WATER QUALITY DATA REGION 6

101

B.O.W./ SITE: NEEBING RIVER
 SAMPLE POINT: HWYS.11&17 WEST OF MAPLEWOOD SIDE ROAD
 STATION TYPE: RIVER

STATION ID: 01-0107-002-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: NEEBING RIVER

STORET CODE: 02
 001
 7910

LAT: 48 22 54.32 LONG: 089 21 29.07

U T M: 16 0325400.0 5361200.0 4

REGION: 06

DISTANCE: 13.840

*INTERIM TEST-NAME:		PPUT	RSP	RST	TCHF COLIFORM TOTAL MF CNT /100ML	TCMFBK COLIFORM TOTAL MF BCKGRD CNT /100ML	TURB TURB'ITY FTU	ZNUT ZINC UNF.TOT. MG/L AS ZN
SAMPLE DATE YYMMDD	HOURL LMT	SAMPLE NUMBER	PHOSPHOR UNF.TOT. MG/L AS P	RESIDUE PARTIC. MG/L	RESIDUE TOTAL MG/L			
830110	1420	10012	0.012	1.00	180.00	30AID	460	4.80
830214	1130	10026	0.011	1.00	190.00	310	2000	5.20
830314	1145	10039	0.041	4.00	160.00	150	1660	2.80
830412	1140	10051	0.140	130.00	300.00	260	2000	19.00
830517	0950	10074	0.013	4.00	160.00	100	1310	1.90
830613	1450	10095	0.010	3.00	150.00	100AID	4300	1.70
830704	1200	10117	0.048	35.00	240.00	1800	20000	4.60
830815	1515	10141	0.017	5.00	220.00	2500	15000	2.90
830920	1140	10165	0.016	2.00	180.00	400AID	6700	3.50
831011	1105	10188	0.020	3.00	220.00	600AID	6000	3.70
831114	1445	10202	0.009	3.00	180.00	90AID	1200	2.00
831212	1530	10215	0.014	5.00	210.00	20AID	600	2.30
MAXIMUM			0.140	130.00	300.00	2500	20000	19.00
ARITH MEAN			0.029	16.33	199.17	530	5102	4.53
GEOM MEAN			0.020	4.63	195.48	209	2699	3.50
MINIMUM			0.009	1.00	150.00	20	460	1.70
STD DEV (GEOM *)			0.037	36.98	42.09	4*	3*	4.71
# SAMP IN STATISTICS			12	12	12	12	12	6
% SAMP (EXCLUDED)								

B.O.W./ SITE: NEED-MCINTYRE RIVER
SAMPLE POINT: DIVERSION AT 110TH AVE
STATION TYPE: RIVER

STATION ID: 01-0107-003-02

MAJOR BASIN: GREAT LAKES
MINOR BASIN: LAKE SUPERIOR
TERM STREAM: NEED- MCINTYRE RIVER

STORET CODE: 02
001
7910

LAT: 48 23 46.07 LONG: 089 13 25.10

U T M: 16 0335400.0 5362500.0 4

REGION: 06

DISTANCE: 0.960

*INTERIM		TEST-NAME:	FWSADP	FGPROJ	ALKT	ASUT	BOD5	CCNAUR	CCNFUR	CDUT	CLIDUR	COLAP		
					ALK	ARSENIC	BOD	CYANIDE	CYANIDE					
					TOTAL	UNF.TOT.	5 DAY	AVAIL	FREE	CADMIUM	CHLORIDE			
SAMPLE			SAMPLE	PROJECT	MG/L	MG/L	TOT.DEM.	UNF.REAC	UNF.REAC	UNF.TOT.	UNF.REAC	COLOUR		
DATE	HOUR	SAMPLE	DEPTH	SUB-PROJ	AS	AS	MG/L	MG/L	MG/L	MG/L	MG/L	APPEARNT		
YYMMDD	LMT	NUMBER	M	CODE	AS	CAO3	AS	O	HCN	CD	CL-	HZU		
830517	1400	10073	0.30	0101	68.0	0.0010	<	0.40	0.001	<	0.0005	<	12.000	73.000
830613		10096	0.30	0101	78.0			1.00			13.000		91.000	
830704	1415	10119	0.30	0101	86.0	0.0010	<	1.10	0.001	<W	0.0001	<	10.000	121.000
830815	1345	10142	0.30	0101	84.0	0.0010	<	0.60			0.0010		22.000	58.000
830919	1210	10166	0.30	0101	114.0	0.0010	<	1.00	0.001	<W	0.0005	<	29.000	77.000
831012	1430	10189	0.30	0101	86.0	0.0010		0.80			0.0005	<	23.000	88.000
831114	1315	10203	0.30	0101	91.0			0.90			24.000		85.000	
831212	1330	10216	0.30	0101	91.0	0.0010	<	1.20			0.0005	<	40.000	74.000
		MAXIMUM	0.30		114.0	0.0010		1.20	0.001		0.0010		40.000	121.000
		ARITH MEAN	0.30		87.2	0.0010		0.87	0.001	<A	0.0010		21.625	83.375
		GEOM MEAN			86.4			0.83			0.001	<A	19.622	81.710
		MINIMUM	0.30		68.0	0.0010		0.40	0.001		0.0010		10.000	58.000
		STD DEV (GEOM *)			13.2			0.27			0.000	<A	10.013	18.431
# SAMP IN STATISTICS			8		8		8		2		1		8	8
% SAMP (EXCLUDED)						83			33		83			

*INTERIM		TEST-NAME:	COND25	COUT	CRUT	CUUT	DO	FCMF	FEUT	FVPH	FWSTRC	FWTEMP
			CONDUCT.	COBALT	CHROMIUM	COPPER	DISOLVED	FECAL	IRON			
SAMPLE			25C	UNF.TOT.	UNF.TOT.	UNF.TOT.	OXYGEN	COLIFORM	UNF.TOT.			
DATE	HOUR	SAMPLE	UMHO/CM	MG/L	MG/L	MG/L	MG/L	MF	MG/L	PH	STREAM	WATER
YYMMDD	LMT	NUMBER	AT 25 C	AS CO	AS CR	AS CU	AS O	CNT	AS FE	FIELD	COND.	TEMP
								/100ML				DEG.C
830517	1400	10073	191.0	0.0020<	0.0040	0.0030	11.6	24	0.8500	7.5	8	7.0
830613		10096	208.0			0.0030	9.5	148	0.7500	7.3		15.5
830704	1415	10119	204.0	0.0020<	0.0020<	0.0050	9.7	360		7.5	8	13.0
830815	1345	10142	260.0	0.0020<	0.0080	0.0050	7.9	110	0.7500	7.6		21.0
830919	1210	10166	324.0	0.0020	0.0030	0.0040	7.6	110	0.1800	7.4	8	14.0
831012	1430	10189	272.0	0.0020<	0.0030	0.0040	9.7	800AID	2.6000		8	9.5
831114	1315	10203	279.0				10.4	110	1.5000	7.2	8 4	1.5
831212	1330	10216	276.0	0.0020<	0.0020<	0.0020	13.1	200	0.9500	7.0	4	0.0
		MAXIMUM	324.0	0.0020	0.0080	0.0050	13.1	800	2.6000	7.6		21.0
		ARITH MEAN	251.7	0.0020	0.0045	0.0037	9.8	233	1.0829	7.4		10.2
		GEOM MEAN	248.0			0.0036	9.6	151	0.8493	7.4		
		MINIMUM	191.0	0.0020	0.0030	0.0020	7.0	24	0.1800	7.0		0.0
		STD DEV (GEOM *)	46.2			0.0011	2.0	3*	0.7729	0.2		
		# SAMP IN STATISTICS	8	1	4	7	8	8	7	7		8
		% SAMP (EXCLUDED)		83	33							

(C O N T D)

B.O.W./ SITE: NEED-MCINTYRE RIVER
SAMPLE POINT: DIVERSION AT 110TH AVE
STATION TYPE: RIVER

STATION ID: 01-0107-003-02

MAJOR BASIN: GREAT LAKES
MINOR BASIN: LAKE SUPERIOR
TERM STREAM: NEED- MCINTYRE RIVER

STORET CODE: 02
001
7910

LAT: 48 23 46.07 LONG: 089 13 25.10 U T M: 16 0335400.0 5362500.0 4 REGION: 06 DISTANCE: 0.960

*INTERIM		TEST-NAME:	HARDT	HGUT	MGUR	MNUT	NIUT	NNHTFR	NNQ2FR	NNQ3FR	NNTKUR	PBUT
			HARDNESS	MERCURY	MAGNESIM	MANGANSE	NICKEL	NH3-N			K'DAHL N	
SAMPLE			TOTAL	UNF.TOT.	FIL.REAC	UNF.TOT.	UNF.TOT.	FIL.REAC	FIL.REAC	FIL.REAC	UNF.REAC	UNF.TOT.
DATE	HOUR	SAMPLE	MG/L	UG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
YYMMDD	LMT	NUMBER	AS CAC03	AS HG	AS MG	AS MN	AS NI	AS N	AS N	AS N	AS N	AS PB
830517	1400	10073	86.000	0.050<	7.700	0.056	0.002 <	0.020	0.005	0.120	0.600	0.004
830613		10096	96.000			0.061						
830704	1415	10119	100.000	0.050<	9.600		0.0020<	0.020	0.006	0.080	0.640	0.003<
830815	1345	10142	107.000	0.050<	11.000	0.085	0.007	0.060	0.009	0.190	0.550	0.005
830919	1210	10166	144.000	0.050<	12.000	1.100	0.002	0.080	0.008	0.130	0.580	0.003<
831012	1430	10189	116.000	0.050<	10.000	0.110	0.002 <	0.050	0.007	0.160	0.930	0.004
831114	1315	10203	117.000		11.000	0.110		0.060	0.002	0.160	0.530	
831212	1330	10216	122.000	0.050<	11.000	0.120	0.002	0.050	0.004	0.330	0.700	0.006
MAXIMUM			144.000		12.000	1.100	0.007	0.080	0.009	0.330	0.930	0.006
ARITH MEAN			111.000		10.329	0.235	0.004	0.049	0.006	0.167	0.647	0.005
GEOM MEAN			109.759		10.240	0.125		0.043	0.005	0.153	0.636	
MINIMUM			86.000		7.700	0.056	0.002	0.020	0.002	0.080	0.530	0.004
STD DEV (GEOM *)			17.960		1.396	0.382		0.022	0.002	0.080	0.137	
# SAMP IN STATISTICS			8		7	7	3	7	7	7	7	4
% SAMP (EXCLUDED)							50					33

[illegible]

1983 WATER QUALITY DATA REGION 6

104

B.O.W./ SITE: KAMINISTIGUIA RIVER
 SAMPLE POINT: AT HIGHWAY NO 618 THUNDER BAY
 STATION TYPE: RIVER FLOW GAUGE FED 02AB006

STATION ID: 01-0108-001-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: KAMINISTIGUIA RIVER

STORET CODE: 02
 001
 7920

LAT: 48 21 32.00 LONG: 089 17 14.98

U T M: 16 0330550.0 5358500.0 4

REGION: 06

DISTANCE: 6.759

*INTERIM TEST-NAME:		FWSADP	FGPROJ	ALKT	ASUT	BOD5	CCNAUR	CCNFUR	CDUT	CLIDUR	COLAP
						BOD	CYANIDE	CYANIDE	CADMIUM	CHLORIDE	COLOUR
						5 DAY	AVAIL	FREE	TOT.	UNF. REAC	APPARENT
SAMPLE				ALK	ARSENIC	TOT. DEM.	UNF. REAC	UNF. REAC	UNF. TOT.	UNF. REAC	COLOUR
DATE	HR	SAMPLE	SAMPLE	TOTAL	UNF. TOT.	TOT. DEM.	UNF. REAC	UNF. REAC	UNF. TOT.	UNF. REAC	COLOUR
YYMMDD	LMT	NUMBER	DEPTH	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	APPARENT
			M	AS CACO3	AS AS	AS O	AS HCN	AS HCN	AS CD	AS CL-	HZU
830106	1055	40000	0.30	0103	34.0				0.0005<		
830110	1100	10003	0.30	0101	33.0	0.0010<			0.0005<	9.300	
830112	0950	40001	0.30	0103	36.0			0.001<T	0.0005<W		
830119	1100	40002	0.30	0103	35.0				0.0005<		
830126	1115	40003	0.30	0103	35.0				0.0005<		
830202	1120	40004	0.30	0103	34.0				0.0005<		
830209	0950	40005	0.30	0103	33.0				0.0005<		
830214		10017	0.30	0101	33.0	0.0010<			0.0010	8.400	
830216	0910	40006	0.30	0103	32.0				0.0005<		
830223	1100	40007	0.30	0103	33.0				0.0005		
830302	0925	40008	0.30	0103	34.0				0.0025		
830309	1040	40009	0.30	0103	37.0				0.0005		
830314	0930	10030	0.30	0101	38.0	0.0010			0.0020	8.100	
830316	0915	40010	0.30	0103	36.0				0.0005<		
830323	0900	40011	0.30	0103	35.0				0.0005<		
830330	0900	40012	0.30	0103	36.0				0.0010		
830406	0840	40013	0.30	0103	38.0				0.0010		
830412	0940	10043	0.30	0101	48.0	0.0010<		0.001<W	0.001<W	7.500	102.000
830413	0920	40014	0.30	0103	48.0				0.0010		
830420	1000	40015	0.30	0103	42.0				0.0010		
830427	0925	40016	0.30	0103	34.0				0.0005<		
830504	0915	40017	0.30	0103	34.0				0.0005<		
830509	1410	46054	0.30	0103	27.0				0.0005<		
		46056	0.30	0103							
830512	0925	40018	0.30	0103	40.0				0.0005<		
830516	1300	10065	0.30	0101	46.0	0.0010		0.001<W	0.001<W	17.000	188.000
830518	0930	40019	0.30	0103	46.0				0.0005<		
830526	0915	40020	0.30	0103	51.0				0.0005<		
830603	0950	40021	0.30	0103	40.0				0.0005<		
830608	1135	40022	0.30	0103	34.0				0.0005<		
830613		10087	0.30	0101	40.0	0.0010<			0.0005<	13.000	163.000
830616	0935	40023	0.30	0103	38.0				0.0005<		
830622	1350	40024	0.30	0103	48.0				0.0010		
830629	0910	40025	0.30	0103	39.0				0.0005<		
830705	1315	10110	0.30	0101	48.0	0.0010<		0.001<W	0.001<W	5.000	160.000
830707	1120	40026	0.30	0103	31.0				0.0005		
830714	0910	40027	0.30	0103	30.0						
830720	0910	40028	0.30	0103	32.0				0.0005<		
830728	0910	40029	0.30	0103	33.0				0.0005		
830803	0930	40030	0.30	0103	35.0				0.0010		

(C O N T D)

1983 WATER QUALITY DATA REGION 6

105

B.O.W./ SITE: KAMINISTIGUIA RIVER
 SAMPLE POINT: AT HIGHWAY NO 61B THUNDER BAY
 STATION TYPE: RIVER FLOW GAUGE FED 02AB006

STATION ID: 01-0108-001-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: KAMINISTIGUIA RIVER

STORET CODE: 02
 001
 7920

LAT: 48 21 32.00 LONG: 089 17 14.98

U T M: 16 0330550.0 5358500.0 4

REGION: 06

DISTANCE: 6.759

*INTERIM TEST-NAME:		FWSADP	FGPROJ	ALKT	ASUT	BOD5	CCNAUR	CCNFUR	CDUT	CLIDUR	COLAP	
SAMPLE	DATE	SAMPLE	SAMPLE	PROJECT	ALK	ARSENIC	BOD	CYANIDE	CYANIDE	CADMIUM	CHLORIDE	COLOUR
YYMMDD	HOUR	NUMBER	DEPTH	SUB-PROJ	TOTAL	UNF.TOT.	5 DAY	AVAIL	FREE	UNF.TOT.	UNF.REAC	APPARENT
LMT		M	CODE	AS CAC03	MG/L	MG/L	TOT.DEM.	MG/L	MG/L	MG/L	MG/L	HZU
					AS	AS	AS O	AS HCN	AS HCN	AS CD	AS CL-	
830810	1015	40031	0.30	0103	38.0		8.20			0.0005		
830815	1235	10133	0.30	0101	37.0	0.0010<	4.50			0.0005	11.000	106.000
830819	0935	40032	0.30	0103	39.0		3.00			0.0005		
830824	0930	40033	0.30	0103	38.0		5.80			0.0005		
830901	1335	40034	0.30	0101	39.0		7.20			0.0005<		
830907	1330	40035	0.30	0103	42.0		3.20			0.0005<		
830913	1410	40036	0.30	0103	42.0		6.20			0.0005<		
830919	1425	10157	0.30	0101	40.0	0.0010<	4.40	0.001<W	0.001<W	0.0035<	9.900	102.000
830922	0840	40037	0.30	0103	36.0		11.00			0.0005<		
830928	0900	40038	0.30	0103	37.0		13.00			0.0006		
831005	0915	40039	0.30	0103	49.0		6.60			0.0007		
831012	1330	10180	0.30	0101	39.0	0.0010	6.00			0.0005<	9.700	124.000
831019	1040	40040	0.30	0103	49.0		6.80			0.0005<		
831026	0920	40041	0.30	0103	46.0		10.00			0.0005<		
831101	0920	40042	0.30	0101	42.0		14.00			0.0005<		
831109	1000	40043	0.30	0101	39.0		8.80			0.0005<		
831114	1015	10194	0.30	0101	34.0		6.40				7.500	103.000
831116	0900	40044	0.30	0101	34.0		7.60			0.0005<		
831123	0925	40045	0.30	0101	44.0		5.20			0.0005<		
831201	0935	40046	0.30	0101	44.0		7.20			0.0005<		
831207	0930	40047	0.30	0101	40.0		7.80			0.0005<		
831212	1000	10207	0.30	0101	36.0	0.0010<	6.60			0.0005<	10.000	135.000
831214	0930	40048	0.30	0101	36.0		7.40			0.0005<		
831221	0915	40049	0.30	0101	37.0		6.40			0.0005<		
831228	1040	40050	0.30	0101	36.0		7.80			0.0005<		
MAXIMUM		0.30			51.0	0.0010	16.00	0.001	0.001	0.0025	17.000	188.000
ARITH MEAN		0.30			38.3	0.0010	7.77	0.001<A	0.001<A	0.0009	9.700	131.444
GEOM MEAN					37.9		7.13	0.001<A	0.001<A		9.294	128.153
MINIMUM		0.30			27.0	0.0010	2.40	0.001	0.001	0.0005	5.000	102.000
STD DEV (GEOM %)					5.3		3.09	0.000<A	0.000<A		3.048	32.149
# SAMP IN STATISTICS		65			64	3	63	5	5	22	12	9
% SAMP (EXCLUDED)						72				64		

(CONTD)

1983 WATER QUALITY DATA REGION 6

106

B.O.W./ SITE: KAMINISTIGUIA RIVER
 SAMPLE POINT: AT HIGHWAY NO 61B THUNDER BAY
 STATION TYPE: RIVER FLOW GAUGE FED 02AB006

STATION ID: 01-0108-001-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: KAMINISTIGUIA RIVER

STORET CODE: 02
 001
 7920

LAT: 48 21 32.00 LONG: 089 17 14.98

U T M: 16 0330550.0 5358500.0 4

REGION: 06

DISTANCE: 6.759

*INTERIM		TEST-NAME:	COND25	COUT	CRUT	CUUT	DO	FCMF	FEUT	FSMF	FMPH	FWSTRC
			CONDUCT.	COBALT	CHROMIUM	COPPER	DISSOLVED	FECAL	IRON	FECAL		
			25C	UNF.TOT.	UNF.TOT.	UNF.TOT.	OXYGEN	COLIFORM	UNF.TOT.	STREPCUS		
			UMHO/CM	MG/L	MG/L	MG/L	MG/L	MF	MG/L	MF		
			AT 25 C	AS CO	AS CR	AS CU	AS O	CNT	AS FE	CNT	PH	STREAM
								/100ML		/100ML	FIELD	COND.
SAMPLE	DATE	TIME	SAMPLE									
YYMMDD	LMT	NUMBER										
830106	1055	40000				0.0050	12.6	940				4
830110	1100	10003	151.0		0.0160	0.0030	12.0	400			7.2	4
830112	0950	40001				0.0050	14.8	100AID				4
830119	1100	40002				0.0030	12.0	700AID				4
830126	1115	40003				0.0030	14.8	1500				4
830202	1120	40004				0.0030	12.8	2800				
830209	0950	40005				0.0040	12.9	200AID				4
830214		10017	144.0	0.0020<	0.0270	0.0030	12.8	1000	0.4300		7.0	9
830216	0910	40006				0.0030	11.6	1800				9
830223	1100	40007				0.003	10.2	1500				9
830302	0925	40008				0.0030	12.4					4 9
830309	1040	40009				0.0050	12.2					
830314	0930	10030	136.0	0.0020	0.0130	0.0110	9.4	200C	0.7900		7.5	9
830316	0915	40010				0.0050	12.6	400				9
830323	0900	40011				0.0040	11.0	100C				4
830330	0900	40012				0.0050	11.6	800C				9
830406	0840	40013				0.0050	12.0	500AID				9
830412	0940	10043	144.0		0.0110	0.0050	12.0	1000AID			7.3	9
830413	0920	40014				0.0080	12.2	300AID				
830420	1000	40015	176.0			0.0030	13.0	1100				9
830427	0925	40016	98.0			0.0150	12.2	1600				9 3
830504	0915	40017	119.0			0.0030	10.6	100C				3
830509	1410	46054	72.0			0.002						
830512	0925	40018	187.0			0.0040	9.6	1000AID				9
830516	1300	10065	197.0		0.0220	0.0030	9.4	800C			7.5	9
830518	0930	40019	213.0			0.0040	8.0	1000AID				9
830526	0915	40020	213.0			0.0040	7.7	1000AID				
830603	0950	40021	148.0			0.0050	7.9	1000AID				9
830608	1135	40022	128.0			0.0050	8.0	3000AID				9
830613		10087	193.0	0.0020<	0.0350	0.0040	8.2	100<	0.6300			9
830616	0935	40023	172.0			0.0060	6.2	500C				9
830622	1350	40024	188.0			0.0040	5.8	300C				9
830629	0910	40025	147.0			0.0040	6.6	1000C				9
830705	1315	10110	122.0		0.0190	0.0110	8.8	700AID			7.4	9
830707	1120	40026	93.0			0.0070	9.0	3000AID				9
830714	0910	40027	106.0			0.0070	6.7	500C				9
830720	0910	40028	130.0			0.0060	6.1	400AID				9
830728	0910	40029	140.0			0.0050	6.2	10000<				9
830803	0930	40030	133.0			0.0050	6.8	6000AID				9
830810	1015	40031	153.0			0.0030	5.0	1000C				9

(CONT'D)

1983 WATER QUALITY DATA REGION 6

107

B.O.W./ SITE: KAHINISTIQUEA RIVER
 SAMPLE POINT: AT HIGHWAY NO 61B THUNDER BAY
 STATION TYPE: RIVER FLOW GAUGE FED 02AB006

STATION ID: 01-0108-001-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: KAHINISTIQUEA RIVER

STORET CODE: 02
 001
 7920

LAT: 48 21 32.00 LONG: 089 17 14.98

U T M: 16 0330550.0 5358500.0 4

REGION: 06

DISTANCE: 6.759

*INTERIM TEST-NAME:		COND25	COUT	CRUT	CUUT	DO	FCMF FECAL COLIFORM	FEUT	FSMF FECAL STREPCUS	FMPH	FWSTRC
SAMPLE DATE YYMMDD	HR LMT	SAMPLE NUMBER	CONDUCT. 25C UMHO/CM AT 25 C	COBALT UNF.TOT. MG/L AS CO	CHROMIUM UNF.TOT. MG/L AS CR	COPPER UNF.TOT. MG/L AS CU	DISOLVED OXYGEN MG/L AS O	IRON UNF.TOT. MG/L AS FE	IRON UNF.TOT. MG/L AS FE	PH FIELD	STREAM COND.
830815	1235	10133	148.0	0.0020<	0.0160	0.0060	5.6	100<	0.4500	7.2	8
830819	0935	40032	156.0			0.0050	3.0	2000C			9
830824	0930	40033	176.0			0.0050	4.6	4000C			0
830901	1335	40034	184.0			0.0050	3.1	1000C			
830907	1330	40035	159.0			0.0050	3.5	2000AID			9
830913	1410	40036	197.0			0.0050	5.1	300C			9
830919	1425	10157	174.0		0.0250	0.0040	6.7	400C		7.4	9
830922	0840	40037	204.0			0.0050	6.6	600AID			9
830928	0900	40038	183.0			0.0080	7.0	1200			9
831005	0915	40039	204.0			0.0050	7.1	600AID			9
831012	1330	10180	186.0	0.0020<	0.0210	0.0040	8.8	4000AID	0.8100		9
831019	1040	40040	179.0			0.0070	11.0	9000AID			
831026	0920	40041	214.0			0.0060	8.9	200C			
831101	0920	40042	202.0			0.0040	10.0	5700			9
831109	1000	40043	194.0			0.0040	10.2	800AID			
831114	1015	10194	149.0	0.0020<	0.0300	0.0040	11.4	1800	0.4400	7.0	
831116	0900	40044	132.0			0.0040	11.5	700AID			
831123	0925	40045	174.0			0.0080	12.7	1000			
831201	0935	40046	181.0			0.0050	11.7	43000			4
831207	0930	40047	172.0			0.0040	13.0	600AID			4
831212	1000	10207	164.0	0.0020<	0.0290	0.0030	13.9	100AID	0.4600	6.9	4
831214	0930	40048	147.0			0.0040	12.3	600AID			4 9
831221	0915	40049	135.0			0.0030	13.8	200AID			4
831228	1040	40050	159.0			0.0030	12.9	2000			4
MAXIMUM			214.0	0.0020	0.0350	0.0150	14.8	43000	0.8100	8	7.5
ARITH MEAN			160.7	0.0020	0.0220	0.005	9.7	2070	0.5729	8	7.2
GEOM MEAN			156.9		0.0208	0.005	9.1		0.5529		7.2
MINIMUM			72.0	0.0020	0.0110	0.002	3.0	100	0.4300	8	6.9
STD DEV (GEOM *)			33.2		0.0074	0.002	3.1		0.1696		0.2
# SAMP IN STATISTICS			49	1	12	64	63	58	7	1	10
% SAMP (EXCLUDED)				85				4			

(CONTD)

1983 WATER QUALITY DATA REGION 6

108

B.O.W./ SITE: KAMINISTIGUIA RIVER
 SAMPLE POINT: AT HIGHWAY NO 61B THUNDER BAY
 STATION TYPE: RIVER FLOW GAUGE FED 02AB006

STATION ID: 01-0108-001-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: KAMINISTIGUIA RIVER

STORET CODE: 02
 001
 7920

LAT: 48 21 32.00 LONG: 089 17 14.98

U T M: 16 0330550.0 5358500.0 4

REGION: 06

DISTANCE: 6.759

*INTERIM		TEST-NAME:	FWTEMP	HARDT	HGUT	MNUT	NIUT	NNHTFR NH3-N TOTAL	NN02FR	NN03FR	NNTKUR K'DAHL N TOTAL	PBUT
SAMPLE DATE	HOUR LMT	SAMPLE NUMBER	WATER TEMP DEG.C	HARDNESS TOTAL MG/L AS CAC03	MERCURY UNF.TOT. UG/L AS HG	MANGANSE UNF.TOT. MG/L AS MN	NICKEL UNF.TOT. MG/L AS NI	FIL.REAC MG/L AS N	NO2-N FIL.REAC MG/L AS N	NO3-N FIL.REAC MG/L AS N	UNF.REAC MG/L AS N	LEAD UNF.TOT. MG/L AS PB
830106	1055	40000	1.0		0.050<					0.080		0.003<
830110	1100	10003	1.0	37.000	0.050<			0.010<	0.007	0.170	0.570	0.003<
830112	0950	40001	1.0		0.050<					0.190		0.003<
830119	1100	40002	1.0		0.050<					0.070		0.003<
830126	1115	40003	1.0		0.050<					0.040		0.003<
830202	1120	40004	0.5		0.050<					0.030		0.003<
830209	0950	40005	1.0		0.050<					0.040		0.003<
830214		10017	1.5	40.000	0.050<	0.028		0.010<	0.002	0.120	0.540	0.003<
830216	0910	40006	3.0		0.050<					0.210		0.003<
830223	1100	40007	2.0		0.050<					0.210		0.003<
830302	0925	40008	1.0		0.050<					0.050		0.003<
830309	1040	40009	1.0		0.050<					0.300		0.006
830314	0930	10030	1.5	44.000	0.050<	0.039		0.050	0.008	0.270	0.470	0.005
830316	0915	40010	1.0		0.050<					0.150		0.005
830323	0900	40011	0.5		0.050<					0.190		0.005
830330	0900	40012	1.0		0.050<					0.010		0.003<
830406	0840	40013	1.0		0.050<					0.180		0.003<
830412	0940	10043	3.5	57.000	0.050<			0.010<	0.006	0.010<	0.550	0.003<
830413	0920	40014	1.5		0.050<					0.150		0.003<
830420	1000	40015	2.0		0.050<					0.070		0.005
830427	0925	40016	2.5		0.050<					0.120		0.003<
830504	0915	40017	8.0		0.050<					0.050		0.003<
830509	1410	46054			0.05 <					0.08		0.003<
830512	0925	40018	11.5		0.050<					0.050		0.003<
830516	1300	10065	10.5	50.000	0.050			0.010<	0.009	0.010<	0.640	0.003<
830518	0930	40019	12.5		0.050<					0.010		0.003<
830526	0915	40020	12.0		0.050<					0.010<		0.003<
830603	0950	40021	18.0		0.050<					0.010<		0.003<
830608	1135	40022	19.0		0.050<					0.030		0.003<
830613		10087	17.5	45.000		0.051		0.010<	0.008	0.010<	0.550	0.003<
830616	0935	40023	21.5		0.050<					0.010		0.003<
830622	1350	40024	20.0		0.050<					0.010		0.003<
830629	0910	40025	20.0							0.020		0.003<
830705	1315	10110	14.5	54.000	0.050<			0.010	0.013	0.040	0.800	0.003<
830707	1120	40026	16.0		0.050<					0.010		0.003<
830714	0910	40027	21.5		0.050<					0.010		0.008
830720	0910	40028	23.0		0.050<					0.010<		0.009
830728	0910	40029	24.0		0.050<					0.010		0.006
830803	0930	40030	22.0		0.050<					0.010<		0.003
830810	1015	40031	23.0		0.050<							0.005

(CONT'D)

1983 WATER QUALITY DATA REGION 6

109

B.O.W./ SITE: KAMINISTIGUIA RIVER
 SAMPLE POINT: AT HIGHWAY NO 618 THUNDER BAY
 STATION TYPE: RIVER FLOW GAUGE FED 02AB006

STATION ID: 01-0108-001-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: KAMINISTIGUIA RIVER

STORET CODE: 02
 001
 7920

LAT: 48 21 32.00 LONG: 089 17 14.98

U T M: 16 0330550.0 5358500.0 4

REGION: 06

DISTANCE: 6.759

*INTERIM TEST-NAME:		FWTEMP	HARDT	HGUT	MNUT	NIUT	NNHTFR NH3-N TOTAL	NNO2FR NO2-N FIL.REAC	NNO3FR NO3-N FIL.REAC	NNTKUR K'DAHL N TOTAL	PBUT LEAD UNF.TOT.	
SAMPLE DATE YYMMDD	HOURLMT	SAMPLE NUMBER	WATER TEMP DEG.C	HARDNESS TOTAL MG/L AS CaCO3	MERCURY UNF.TOT. UG/L AS HG	MANGANESE UNF.TOT. MG/L AS MN	NICKEL UNF.TOT. MG/L AS NI	FIL.REAC MG/L AS N	FIL.REAC MG/L AS N	FIL.REAC MG/L AS N	UNF.REAC MG/L AS N	UNF.TOT. MG/L AS PB
830815	1235	10133	24.0	43.000	0.050<	0.053	0.006	0.010<	0.004	0.010<	0.520	0.003<
830819	0935	40032	23.0		0.050<					0.010<		0.003
830824	0930	40033	21.5		0.050<					0.010<		0.006
830901	1335	40034	24.0		0.050<					0.010		0.003<
830907	1330	40035	21.0		0.050<					0.040		0.004
830913	1410	40036	18.5		0.050<					0.010<		0.003<
830919	1425	10157	16.0	44.000	0.050<			0.010	0.005	0.010	0.480	0.003<
830922	0840	40037	13.5		0.050<					0.010<		0.003<
830928	0900	40038	15.0		0.050<					0.010<		0.006<
831005	0915	40039	13.5							0.010<		0.003<
831012	1330	10180	11.5	47.000	0.050<	0.047		0.030	0.004	0.010<	0.530	0.003<
831019	1040	40040	6.0		0.050<					0.010		0.003<
831026	0920	40041	8.0		0.050<					0.010		0.003<
831101	0920	40042	6.0		0.050<					0.020		0.008
831109	1000	40043	6.0		0.050<					0.010		0.003<
831114	1015	10194	2.0	41.000	0.050<	0.028		0.010<	0.006	0.020	0.580	0.003
831116	0900	40044	3.0		0.050<					0.040		0.003<
831123	0925	40045	1.0		0.050<					0.380		0.003<
831201	0935	40046	1.5		0.050<					0.250		0.003<
831207	0930	40047	1.0		0.050<					0.010		0.003<
831212	1000	10207	0.0	42.000	0.050<	0.042		0.010	0.006	0.200	0.520	0.003<
831214	0930	40048	1.0		0.050<					0.040		0.003<
831221	0915	40049	1.0		0.050<					0.150		0.003<
831228	1040	40050	0.5		0.050<					0.090		0.003<
	MAXIMUM		24.0	57.000	0.050	0.053	0.006	0.050	0.013	0.380	0.800	0.009
	ARITH MEAN		9.2	45.333	0.050	0.041	0.006	0.022	0.006	0.09	0.562	0.005
	GEOM MEAN			45.006		0.040			0.006		0.557	
	MINIMUM		0.0	37.000	0.050	0.028	0.006	0.010	0.002	0.010	0.470	0.003
	STD DEV (GEOM *)			5.821		0.010			0.003		0.087	
# SAMP IN STATISTICS		63		12	1	7	1	5	12	48	12	15
% SAMP (EXCLUDED)					98			58		23		76

(CONTD)

B.O.W./ SITE: KAMINISTIGUIA RIVER
SAMPLE POINT: AT HIGHWAY NO 61B THUNDER BAY
STATION TYPE: RIVER FLOW GAUGE FED 02AB006

STATION ID: 01-0108-001-02

MAJOR BASIN: GREAT LAKES
MINOR BASIN: LAKE SUPERIOR
TERM STREAM: KAMINISTIGUIA RIVER

STORET CODE: 02
001
7920

LAT: 48 21 32.00 LONG: 089 17 14.98

U T M: 16 0330550.0 5358500.0 4

REGION: 06

DISTANCE: 6.759

**=INTERIM		TEST-NAME:	PH	PO4FR	PPUT	PSAMF PSEUDOMN AERUG.	P1ALDR	P1BHCA	P1BHCB	P1BHCG	P1CHLA	P1CHLG
SAMPLE DATE YYMMDD	HOURL LMT	SAMPLE NUMBER	PH	PO4 FIL.REAC MG/L AS P	PHOSPHOR UNF.TOT. MG/L AS P	MF CNT /100ML	ALDRIN NG/L	BHC ALPHA NG/L	BHC BETA NG/L	BHC GAMMA NG/L	CHLRDANE ALPHA NG/L	CHLRDANE GAMMA NG/L
830106	1055	40000		0.002	0.022							
830110	1100	10003	7.20	0.006	0.028							
830112	0950	40001		0.017	0.030	2						
830119	1100	40002		0.004	0.032	2						
830126	1115	40003		0.003	0.039	4						
830202	1120	40004		0.002	0.027	4						
830209	0950	40005		0.003	0.027	2<						
830214		10017	7.10	0.005	0.042							
830216	0910	40006		0.011	0.032	2<						
830223	1100	40007		0.016	0.029							
830302	0925	40008		0.002	0.027							
830309	1040	40009		0.006	0.063							
830314	0930	10030	7.20	0.023	0.042							
830316	0915	40010		0.003	0.037	4						
830323	0900	40011		0.006	0.035	4<						
830330	0900	40012		0.004	0.046	4<						
830406	0840	40013		0.024	0.055	4						
830412	0940	10043	7.30	0.015	0.140							
830413	0920	40014		0.010	0.088	4<						
830420	1000	40015	7.30	0.004	0.046	4<						
830427	0925	40016	7.40	0.023	0.130	4						
830504	0915	40017	7.20	0.007	0.059	4						
830509	1410	46054	7.5	0.002	0.023		1<W	1<W	1<W	1<W	2<W	2<W
		46056					1<W	1<W	1<W	1<W	2<W	2<W
830512	0925	40018	7.30	0.008	0.049	8						
830516	1300	10065	7.30	0.009	0.064							
830518	0930	40019	7.10	0.008	0.076	4						
830526	0915	40020	7.10	0.007	0.068	28C						
830603	0950	40021	7.30	0.007	0.058	4<						
830608	1135	40022	7.10	0.005	0.039							
830613		10087	7.10									
830616	0935	40023	6.70	0.005	0.043	4<						
830622	1350	40024	7.10	0.003	0.068	2<						
830629	0910	40025	6.90	0.005	0.060	2<						
830705	1315	10110	7.50	0.018	0.110							
830707	1120	40026	7.10	0.003	0.049	8						
830714	0910	40027	6.90	0.006	0.044							
830720	0910	40028	6.70	0.002	0.039	2C						
830728	0910	40029	6.80	0.002	0.043	4C						
330803	0930	40030	7.10	0.004	0.030	30AID						

(C O N T D)

1983 WATER QUALITY DATA REGION 6

111

B.O.W./ SITE: KAMINISTIGUIA RIVER
 SAMPLE POINT: AT HIGHWAY NO 61B THUNDER BAY
 STATION TYPE: RIVER FLOW GAUGE FED 02AB006

STATION ID: 01-0108-001-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: KAMINISTIGUIA RIVER

STORET CODE: 02
 001
 7920

LAT: 48 21 32.00 LONG: 089 17 14.98

U T M: 16 0330550.0 5358500.0 4

REGION: 06

DISTANCE: 6.759

*INTERIM		TEST-NAME:	PH	PP04FR	PPUT	PSAMF PSEUDOMN AERUG. MF	P1ALDR	P1BHCA	P1BHCB	P1BHCG	P1CHLA	P1CHLG
SAMPLE DATE YYMMDD	HOUR LMT	SAMPLE NUMBER	PH	PO4 FIL.REAC MG/L AS P	PHOSPHOR UNF.TOT. MG/L AS P	CNT /100ML	ALDRIN NG/L	BHC ALPHA NG/L	BHC BETA NG/L	BHC GAMMA NG/L	CHLRDANE ALPHA NG/L	CHLRDANE GAMMA NG/L
830810	1015	40031	6.90	0.002	0.044	10<						
830815	1235	10133	7.10	0.002	0.042							
830819	0935	40032	6.60	0.005	0.062							
830824	0930	40033	7.00	0.004	0.040	4<						
830901	1335	40034	6.90	0.008	0.051							
830907	1330	40035	6.90	0.003	0.045	16						
830913	1410	40036	7.00	0.007	0.053	10<						
830919	1425	10157	7.20	0.005	0.042							
830922	0840	40037	7.00	0.003	0.070	4C						
830928	0900	40038	7.00	0.006	0.064	4<						
831005	0915	40039	7.10	0.004	0.049	4<						
831012	1330	10180	7.00	0.006	0.037							
831019	1040	40040	7.00	0.011	0.059	4						
831026	0920	40041	7.10	0.012	0.063	4C						
831101	0920	40042	7.00	0.006	0.074	8						
831109	1000	40043	6.90	0.009		4C						
831114	1015	10194	6.80	0.005	0.034							
831116	0900	40044	7.10	0.007	0.032	4<						
831123	0925	40045	7.30	0.017	0.080	24						
831201	0935	40046	7.00	0.023	0.049	12						
831207	0930	40047	7.20	0.005	0.037	4<						
831212	1000	10207	6.90	0.014	0.030							
831214	0930	40048	6.90	0.006	0.032	4<						
831221	0915	40049	7.30	0.014	0.038							
831228	1040	40050	7.10	0.005	0.030	4<						
MAXIMUM			7.5	0.024	0.140	30	1	1	1	1	2	2
ARITH MEAN			7.1	0.008	0.050	8	1<A	1<A	1<A	1<A	2<A	2<A
GEOM MEAN			7.1	0.006	0.046		1<A	1<A	1<A	1<A	2<A	2<A
MINIMUM			6.60	0.002	0.022	2	1	1	1	1	2	2
STD DEV (GEOM *)			0.2	0.006	0.023		0<A	0<A	0<A	0<A	0<A	0<A
# SAMP IN STATISTICS			49	63	62	23	2	2	2	2	2	2
% SAMP (EXCLUDED)						45						

(CONTD)

1983 WATER QUALITY DATA REGION 6

112

B.O.W./ SITE: KAMINISTIGUIA RIVER
 SAMPLE POINT: AT HIGHWAY NO 61B THUNDER BAY
 STATION TYPE: RIVER FLOW GAUGE FED 02AB006

STATION ID: 01-0108-001-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: KAMINISTIGUIA RIVER

STORET CODE: 02
 001
 7920

LAT: 48 21 32.00 LONG: 089 17 14.98 U T M: 16 0330550.0 5358500.0 4 REGION: 06 DISTANCE: 6.759

*INTERIM TEST-NAME:		P1DIEL	P1DMDT	P1ENDR	P1ENDS	P1END1	P1END2	P1HEPE	P1HEPT	P1MIRX	P1OCHL	
SAMPLE DATE	YMMDD LMT	SAMPLE NUMBER	DIELDIN NG/L	DMDT MTHXYLLR NG/L	ENDRIN NG/L	ENDOSULP SULPHATE NG/L	ENDOSULP I NG/L	ENDOSULP II NG/L	HEPTA CHLOR EPOXIDE NG/L	HEPACHOR NG/L	MIREX NG/L	OXCHLANE NG/L
830509	1410	46054	2<W	5<W	4<W	4<W	2<W	4<W	1<W	1<W	5<W	2<W
		46056	2<W	5<W	4<W	4<W	2<W	4<W	1<W	1<W	5<W	2<W
		MAXIMUM	2	5	4	4	2	4	1	1	5	2
		ARITH MEAN	2<A	5<A	4<A	4<A	2<A	4<A	1<A	1<A	5<A	2<A
		GEOM MEAN	2<A	5<A	4<A	4<A	2<A	4<A	1<A	1<A	5<A	2<A
		MINIMUM	2	5	4	4	2	4	1	1	5	2
		STD DEV (GEOM *)	0<A	0<A	0<A	0<A	0<A	0<A	0<A	0<A	0<A	0<A
		# SAMP IN STATISTICS	2	2	2	2	2	2	2	2	2	2
		% SAMP (EXCLUDED)										

*INTERIM TEST-NAME:		P1OPDT	P1PCBT	P1PPDD	P1PPDE	P1PPDT	P2AMET	P2ATRA	P2BLAD	P2PROM	P2PROP	
SAMPLE DATE	YMMDD LMT	SAMPLE NUMBER	OP-DDT NG/L	PCB TOTAL NG/L	PP-DDD NG/L	PP-DDE NG/L	PP-DDT NG/L	AMETRYNE NG/L	ATRAZINE NG/L	BLADEX NG/L	PROMETON NG/L	PRPAZINE NG/L
830110	1100	10003		20<W								
830214		10017		20<W								
830314	0930	10030		20<W								
830420	1000	40015		20<W								
830427	0925	40016		20<W								
830504	0915	40017		20<W								
830509	1410	46054	5<W	20<W	5<W	1<W	5<W	50<W	50<W	100<W	50<W	50<W
		46056	5<W	20<W	5<W	1<W	5<W	50<W	50<W	100<W	50<W	50<W
830516	1300	10065		20<W								
830815	1235	10133		20<W								
830919	1425	10157		20<W								
831012	1330	10180		20<W								
831212	1000	10207		20<W								
		MAXIMUM	5	20	5	1	5	50	50	100	50	50
		ARITH MEAN	5<A	20<A	5<A	1<A	5<A	50<A	50<A	100<A	50<A	50<A
		GEOM MEAN	5<A	20<A	5<A	1<A	5<A	50<A	50<A	100<A	50<A	50<A
		MINIMUM	5	20	5	1	5	50	50	100	50	50
		STD DEV (GEOM *)	0<A	0<A	0<A	0<A	0<A	0<A	0<A	0<A	0<A	0<A
		# SAMP IN STATISTICS	2	13	2	2	2	2	2	2	2	2
		% SAMP (EXCLUDED)										

(CONTD)

1983 WATER QUALITY DATA REGION 6

113

B.O.W./ SITE: KAMINISTIGUIA RIVER
 SAMPLE POINT: AT HIGHWAY NO 618 THUNDER BAY
 STATION TYPE: RIVER FLOW GAUGE FED 02AB006

STATION ID: 01-0108-001-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: KAMINISTIGUIA RIVER

STORET CODE: 02
 001
 7920

LAT: 48 21 32.00 LONG: 089 17 14.98

U T M: 16 0330550.0 5358500.0 4

REGION: 06

DISTANCE: 6.759

*INTERIM TEST-NAME:		P2PROY	P2SENC	P2SIM	RSP	RST	TCMF COLIFORM TOTAL HF CNT /100ML	TCMFBK COLIFORM TOTAL HF BCKGRD CNT /100ML	TURB	X2HCB	ZNUT
SAMPLE DATE YYMMDD	HOURL LMT	SAMPLE NUMBER	PRMTRYNE NG/L	SENCOR NG/L	SIMAZINE NG/L	RESIDUE PARTIC. MG/L	RESIDUE TOTAL MG/L		TURB'ITY FTU	HCB NG/L	ZINC UNF.TOT. MG/L AS ZN
830106	1055	40000				5.00					
830110	1100	10003				4.00	170.00	4400	4600	2.90	0.0130
830112	0950	40001				5.00					
830119	1100	40002				4.00					
830126	1115	40003				6.00					
830202	1120	40004				4.00					
830209	0950	40005				6.00					
830214		10017				7.00	150.00	9900	6100	3.70	0.0070
830216	0910	40006				3.00					
830223	1100	40007				3.00					
830302	0925	40008				3.00					
830309	1040	40009				9.00					
830314	0930	10030				7.00	120.00	270000	10000AID	3.80	0.0110
830316	0915	40010				5.00					
830323	0900	40011				5.00					
830330	0900	40012				7.00					
830406	0840	40013				15.00					
830412	0940	10043				20.00	150.00	1020000	30000AID	21.00	0.0090
830413	0920	40014				35.00					
830420	1000	40015				7.00					
830427	0925	40016				130.00					
830504	0915	40017				20.00					
830509	1410	46054	50<W	100<W	50<W	3				1<W	
		46056	50<W	100<W	50<W					1<W	
830512	0925	40018				10.00					
830516	1300	10065				30.0	210.00	670000	20000AID	19.00	0.0100
830518	0930	40019				30.00					
830526	0915	40020				25.00					
830603	0950	40021				20.00					
830608	1135	40022				15.00					
830613		10087				9.00	170.00	860000	30000AID	0.60	0.0070
830616	0935	40023				10.00					
830622	1350	40024				20.00					
830629	0910	40025				15.00					
830705	1315	10110				95.00	240.00	210000	40000AID	57.00	0.0190
830707	1120	40026				35.00					
830714	0910	40027				15.00					
830720	0910	40028				10.00					
830728	0910	40029				15.00					
830803	0930	40030				6.00					

(C O N T D)

1983 WATER QUALITY DATA REGION 6

114

B.O.W./ SITE: KAMINISTIGUIA RIVER
 SAMPLE POINT: AT HIGHWAY NO 61B THUNDER BAY
 STATION TYPE: RIVER FLOW GAUGE FED 02AB006

STATION ID: 01-0108-001-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: KAMINISTIGUIA RIVER

STORET CODE: 02
 001
 7920

LAT: 48 21 32.00 LONG: 089 17 14.98

U T M: 16 0330550.0 5358500.0 4

REGION: 06

DISTANCE: 6.759

*=INTERIM	TEST-NAME:	P2PROY	P2SENC	P2SIM	RSP	RST	TCMF COLIFORM TOTAL MF CNT /100ML	TCMFBK COLIFORM TOTAL MF BCKGRD CNT /100ML	TURB	X2HCB	ZNUT
SAMPLE DATE HOUR YYMMDD LMT	SAMPLE NUMBER	PRMTRYNE NG/L	SENCOR NG/L	SIMAZINE NG/L	RESIDUE PARTIC. MG/L	RESIDUE TOTAL MG/L			TURB'ITY FTU	HCN NG/L	ZINC UNF.TOT. MG/L AS ZN
830810 1015	40031				9.00						
830815 1235	10133				7.00	190.00	1290000	100000	3.10		0.0080
830819 0935	40032				10.00						
830824 0930	40033				7.00						
830901 1335	40034				10.00						
830907 1330	40035				7.00						
830913 1410	40036				15.00						
830919 1425	10157				7.00	200.00	360000	50000AID	0.30		0.0100
830922 0840	40037				15.00						
830928 0900	40038				20.00						
831005 0915	40039				4.00						
831012 1330	10180				7.00	200.00	200000	10000<	5.70		0.004
831019 1040	40040				10.00						
831026 0920	40041				9.00						
831101 0920	40042				15.00						
831109 1000	40043				7.00						
831114 1015	10194				7.00	140.00	250000	10000AID	3.60		0.006
831116 0900	40044				4.00						
831123 0925	40045				20.00						
831201 0935	40046				3.00						
831207 0930	40047				1.00						
831212 1000	10207				2.00	200.00	270000	10000<	3.00		0.0060
831214 0930	40048				6.00						
831221 0915	40049				8.00						
831228 1040	40050				4.00						
MAXIMUM		50	100	50	130.00	240.00	1290000	100000	57.00	1	0.0190
ARITH MEAN		50<A	100<A	50<A	14	178.33	451192	30070	10.31	1<A	0.009
GEOM MEAN		50<A	100<A	50<A	9	175.21	213758		4.22	1<A	0.008
MINIMUM		50	100	50	1.00	120.00	4400	4600	0.30	1	0.004
STD DEV (GEOM *)		0<A	0<A	0<A	20	34.33	6*		16.17	0<A	0.004
# SAMP IN STATISTICS		2	2	2	64	12	12	10	12	2	12
% SAMP (EXCLUDED)								16			

1983 WATER QUALITY DATA REGION 6

115

B.O.W./ SITE: KAMINISTIGUIA RIVER
 SAMPLE POINT: UPSTREAM OF HIGHWAY NO 61 BRIDGE
 STATION TYPE: RIVER

STATION ID: 01-0108-002-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: KAMINISTIGUIA RIVER

STORET CODE: 02
 001
 7920

LAT: 48 20 44.57 LONG: 089 18 18.45 U T M: 16 0329200.0 5357075.0 4 REGION: 06 DISTANCE: 8.851

*INTERIM TEST-NAME:		FWSADP	FGPROJ	ALKT	ASUT	BOD5	CCNAUR	CCNFUR	CDUT	CLIDUR	COLAP
						BOD	CYANIDE	CYANIDE			
						5 DAY	AVAIL	FREE	CADMIUM	CHLORIDE	COLOUR
						TOT.DEM.	UNF.REAC	UNF.REAC	UNF.TOT.	UNF.REAC	APPARENT
						MG/L	MG/L	MG/L	MG/L	MG/L	HZU
						AS O	AS HCN	AS HCN	AS CD	AS CL-	
SAMPLE		SAMPLE	DEPTH	PROJECT	ALK	ARSENIC					
DATE	HR	NUMBER	M	SUB-PROJ	TOTAL	UNF.TOT.					
YYMMDD	LMT			CODE	MG/L	MG/L					
					AS CAC03	AS AS					
830110	0915	10000	0.30	0101	32.0	0.0010<	1.40	0.001<T	0.001<W	0.0005<	77.000
830214	0900	10013	0.30	0101	30.0		0.60			1.400	73.000
830314	0915	10027	0.30	0101	35.0		1.20			4.000	73.000
830412	0930	10040	0.30	0101	49.0	0.0010	1.10	0.001<W	0.001<W	0.0010	86.000
830516	1310	10061	0.30	0101	39.0	0.0010	0.80	0.001<W	0.001<W	0.0005<	101.000
830613		10083	0.30	0101	34.0		1.10			1.900	107.000
830705	1330	10106	0.30	0101	44.0	0.0010<	1.60	0.001<W	0.001<W	0.0005	169.000
830815	1250	10129	0.30	0101	31.0	0.0010<	0.20			0.0005<	84.000
830919	1440	10153	0.30	0101	34.0	0.0010<	0.50	0.001<W	0.001<W	0.0005<	67.000
831012	1345	10176	0.30	0101	38.0		0.10			2.100	99.000
831114	0950	10190	0.30	0101	32.0		0.60			1.400	86.000
831212	0920	10204	0.30	0101	34.0		1.00			1.400	90.000
		MAXIMUM	0.30		49.0	0.0010	1.60	0.001	0.001	0.0010	169.000
		ARITH MEAN	0.30		36.0	0.0010	0.85	0.001<A	0.001<A	0.0007	92.667
		GEOM MEAN			35.6		0.68	0.001<A	0.001<A		89.880
		MINIMUM	0.30		30.0	0.0010	0.10	0.001	0.001	0.0005	67.000
		STD DEV (GEOM *)			5.7		0.46	0.000<A	0.000<A		26.952
		* SAMP IN STATISTICS	12		12	2	12	5	5	2	12
		% SAMP (EXCLUDED)				66				66	

*INTERIM TEST-NAME:		COND25	COUT	CRUT	CUUT	DO	FCHF	FEUT	FWPH	FWSTRC	FWTEMP
							FECAL				
							COLIFORM	IRON			
							MF	UNF.TOT.			
							CNT	MG/L			
							/100ML	AS FE	PH	STREAM	WATER
									FIELD	COND.	TEMP
SAMPLE		CONDUCT.	COBALT	CHROMIUM	COPPER	DISOLVED					
DATE	HR	25C	UNF.TOT.	UNF.TOT.	UNF.TOT.	OXYGEN					
YYMMDD	LMT	UMHO/CM	MG/L	MG/L	MG/L	MG/L					
		AT 25 C	AS CO	AS CR	AS CU	AS O					
830110	0915	85.0	0.0020<	0.0020	0.0030	13.2	4<	0.4200	7.0	4	0.5
830214	0900	79.0			0.0040	13.2	8	0.5200	7.2	4	0.5
830314	0915	101.0			0.0040	13.4	12	0.7900	7.2	4	0.5
830412	0930	117.0	0.0020	0.0070	0.0110	13.5	16	0.5600	7.1	9	1.5
830516	1310	99.0	0.0020<	0.0010	0.0030	10.1	8	0.8500	7.1	8	9.0
830613		87.0			0.0020	12.0	24	0.4300	7.0	8	9.1
830705	1330	99.0	0.0020	0.0150	0.0150	9.4	400AID	10.0000	7.4		9.0
830815	1250	10129	0.0020<	0.0040	0.0100	7.0		0.4300	7.5		25.0
830919	1440	10153	0.0020<	0.0020<	0.0020	8.2	10AID	0.3000	7.3		15.0
831012	1345	10176			0.0040	9.8	20AID	0.4700		8	10.5
831114	0950	10190	92.0		0.0040	12.8	4	0.3200	7.0	8	2.0
831212	0920	10204	87.0		0.0050	13.9	4<	0.4700	6.9	4	0.0

(CONTD)

1983 WATER QUALITY DATA REGION 6

116

B.O.W./ SITE: KAMINISTIGUIA RIVER
 SAMPLE POINT: UPSTREAM OF HIGHWAY NO 61 BRIDGE
 STATION TYPE: RIVER

STATION ID: 01-0108-002-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: KAMINISTIGUIA RIVER

STORET CODE: 02
 001
 7920

LAT: 48 20 44.57 LONG: 089 18 18.45 U T M: 16 0329200.0 5357075.0 4 REGION: 06 DISTANCE: 8.851

*INTERIM TEST-NAME:		COND25	COU2	CRUT	CUUT	DO	FCMF	FEUT	FWPH	FWSTRC	FWTEMP
		CONDUCT.	COBALT	CHROMIUM	COPPER	DISOLVED	FECAL	IRON			
		25C	UNF.TOT.	UNF.TOT.	UNF.TOT.	OXYGEN	COLIFORM	UNF.TOT.			
SAMPLE	DATE HOUR	UMHO/CM	MG/L	MG/L	MG/L	MG/L	MF	MG/L	PH	STREAM	WATER
YYMMDD LMT	SAMPLE NUMBER	AT 25 C	AS CO	AS CR	AS CU	AS O	CNT /100ML	AS FE	FIELD	COND.	TEMP DEG.C
	MAXIMUM	117.0	0.0020	0.0150	0.0150	13.9	400	10.0000	7.5		25.0
	ARITH MEAN	93.2	0.0020	0.0058	0.0056	11.4	56	1.2967	7.2		6.9
	GEOM MEAN	92.7			0.0045	11.1		0.6199	7.2		
	MINIMUM	79.0	0.0020	0.0010	0.0020	7.0	4	0.3000	6.9		0.0
	STD DEV (GEOM *)	10.2			0.0041	2.4		2.7458	0.2		
	# SAMP IN STATISTICS	12	2	5	12	12	9	12	11		12
	% SAMP (EXCLUDED)		66	16			18				

*INTERIM TEST-NAME:		HARDT	MNUT	NIUT	PBUT	PH	PP04FR	PPUT	RSP	RST	TCMF	
		HARDNESS	MANGANESE	NICKEL	LEAD		P04	PHOSPHOR			COLIFORM	
		TOTAL	UNF.TOT.	UNF.TOT.	UNF.TOT.		FIL.REAC	UNF.TOT.	RESIDUE	RESIDUE	TOTAL	
SAMPLE	DATE HOUR	MG/L	MG/L	MG/L	MG/L		MG/L	MG/L	PARTIC.	TOTAL	MF	
YYMMDD LMT	SAMPLE NUMBER	AS CAC03	AS MN	AS NI	AS PB	PH	AS P	AS P	MG/L	MG/L	CNT /100ML	
830110	0915	10000	34.000	0.012	0.002 <	0.006	7.40	0.002	0.014	4.00	85.00	90AID
830214	0900	10013	38.000	0.012			7.30	0.002	0.015	4.00	75.00	800
830314	0915	10027	41.000	0.026			7.20	0.015	0.042	15.00	75.00	40AID
830412	0930	10040	53.000	0.092	0.004	0.003<	7.60	0.014	0.117	90.00	190.00	490
830516	1310	10061	45.000	0.014	0.002 <	0.003<	7.60	0.005	0.024	6.00	130.00	100AID
830613		10083	41.000	0.013			7.40	0.087	0.150	5.00	120.00	100AID
830705	1330	10106	50.000	0.160	0.0080	0.003<	7.60	0.020	0.260	250.00	390.00	5000AID
830815	1250	10129	36.000	0.017	0.003	0.003<	7.50	0.003	0.013	5.00	100.00	
830919	1440	10153	39.000	0.015	0.002	0.003<	7.60	0.002	0.012	3.00	110.00	500AID
831012	1345	10176	46.000	0.018			7.60	0.005	0.017	2.00	150.00	200AID
831114	0950	10190	36.000	0.012			7.30	0.004	0.011	1.00	100.00	130
831212	0920	10204	40.000	0.019			7.00	0.004	0.015	4.00	120.00	50AID
	MAXIMUM	53.000	0.160	0.0080	0.006	7.60	0.087	0.260	250.00	390.00	5000	
	ARITH MEAN	41.583	0.034	0.004	0.006	7.42	0.014	0.057	32.42	137.08	682	
	GEOM MEAN	41.224	0.022			7.42	0.006	0.029	7.20	122.07	215	
	MINIMUM	34.000	0.012	0.002	0.006	7.00	0.002	0.011	1.00	75.00	40	
	STD DEV (GEOM *)	5.838	0.045			0.20	0.024	0.079	72.84	86.06	4*	
	# SAMP IN STATISTICS	12	12	4	1	12	12	12	12	12	11	
	% SAMP (EXCLUDED)			33	83							

(C O N T D)

1983 WATER QUALITY DATA REGION 6

117

B.O.W./ SITE: KAMINISTIGUIA RIVER
 SAMPLE POINT: UPSTREAM OF HIGHWAY NO 61 BRIDGE
 STATION TYPE: RIVER

STATION ID: 01-0108-002-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: KAMINISTIGUIA RIVER

STORET CODE: 02
 001
 7920

LAT: 48 20 44.57 LONG: 089 18 18.45 U T M: 16 0329200.0 5357075.0 4 REGION: 06 DISTANCE: 8.851

*INTERIM TEST-NAME:		TCHFBK	TURB	ZNUT
		COLIFORM		ZINC
		TOTAL MF		UNF.TOT.
SAMPLE		BCKGRD		MG/L
DATE	HOUR	CNT	TURB*ITY	
YYMMDD	LMT	/100ML	FTU	AS ZN
830110	0915	10000	270	2.00
830214	0900	10013	180	1.80
830314	0915	10027	710	2.90
830412	0930	10040	910	47.00
830516	1310	10061	8400	6.20
830613		10083	9100	3.40
830705	1330	10106	26000	62.00
830815	1250	10129		2.10
830919	1440	10153	4500	2.30
831012	1345	10176	2200	2.60
831114	0950	10190	560	1.50
831212	0920	10204	500	2.60
MAXIMUM		26000	62.00	0.0210
ARITH MEAN		4848	11.37	0.008
GEOM MEAN		1598	4.21	
MINIMUM		180	1.50	0.001
STD DEV (GEOM *)		5*	20.44	
# SAMP IN STATISTICS		11	12	11
% SAMP (EXCLUDED)				8

1983 WATER QUALITY DATA REGION 6

118

B.O.W./ SITE: KAMINISTIGUIA RIVER
 SAMPLE POINT: MIDDLE OF TURNING BASIN
 STATION TYPE: RIVER

STATION ID: 01-0108-003-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: KAMINISTIGUIA RIVER

STORET CODE: 02
 001
 7920

LAT: 48 20 44.03 LONG: 089 18 05.06

U T M: 16 0329475.0 5357050.0 4

REGION: 06

DISTANCE: 8.047

*=INTERIM TEST-NAME:		FWSADP	FGPROJ	ALKT	BOD5	CLIDUR	COLAP	COND25	DO	FCMF	FWPH
				ALK	BOD					FECAL	
SAMPLE	DATE		SAMPLE	PROJECT	TOTAL	TOT.DEM.	CHLORIDE	CONDUCT.	DISOLVED	COLIFORM	
DATE	HOUR		DEPTH	SUB-PROJ	MG/L	MG/L	UNF.REAC	25C	OXYGEN	MF	
YYMMDD	LMT	SAMPLE	M	CODE	AS CAC03	AS O	MG/L	UMHO/CM	MG/L	CNT	PH
		NUMBER					AS CL-	AT 25 C	AS O	/100ML	FIELD
830516	1305	10062	0.30	0101	46.0	14.00	16.000	196.000	191.0	500AID	7.8
830613		10084	0.30	0101	37.0	9.60	15.000	175.000	171.0	200C	7.1
830705	1325	10108	0.30	0101	47.0	2.60	4.800	160.000	130.0	400AID	7.4
830815	1242	10130	0.30	0101	37.0	11.00	15.000	136.000	160.0	300C	7.3
830919	1430	10154	0.30	0101	40.0	9.60	9.300	110.000	167.0	24000	7.6
831012	1325	10177	0.30	0101	39.0	4.60	9.000	119.000	190.0	10000	
MAXIMUM			0.30		47.0	14.00	16.000	196.000	191.0	24000	7.8
ARITH MEAN			0.30		41.0	8.57	11.517	149.333	168.2	5900	7.4
GEOM MEAN					40.8	7.44	10.634	146.212	166.8	1193	7.4
MINIMUM			0.30		37.0	2.60	4.800	110.000	130.0	200	7.1
STD DEV (GEOM *)					4.4	4.22	4.488	33.452	22.5	8*	0.3
# SAMP IN STATISTICS		6			6	6	6	6	6	6	5
% SAMP (EXCLUDED)											

*=INTERIM TEST-NAME:		FWSTRC	FWTEMP	HARDT	PH	PP04FR	PPUT	RSP	RST	TCMF	TCMFBK	
										COLIFORM	COLIFORM	
				HARDNESS		P04	PHOSPHOR			TOTAL	TOTAL MF	
SAMPLE	DATE		STREAM	WATER	TOTAL	FIL.REAC	UNF.TOT.	RESIDUE	RESIDUE	MF	BCKGRD	
DATE	HOUR	SAMPLE	COND.	TEMP	MG/L	MG/L	MG/L	PARTIC.	TOTAL	CNT	CNT	
YYMMDD	LMT	NUMBER		DEG.C	AS CAC03	PH	AS P	MG/L	MG/L	/100ML	/100ML	
830516	1305	10062		11.0	47.000	7.50	0.009	0.053	15.00	220.00	590000	100000
830613		10084	9	18.5	45.000	7.00	0.007	0.045	9.00	180.00	1250000	310000
830705	1325	10108		15.0	53.000	7.50	0.018	0.120	90.00	240.00	230000	20000AID
830815	1242	10130		26.0	43.000	7.10	0.002	0.047	8.00	170.00	1080000	40000AID
830919	1430	10154	9	16.5	41.000	7.30	0.006	0.040	8.00	150.00	720000	20000AID
831012	1325	10177	9	12.0	46.000	7.10	0.006	0.035	7.00	180.00	160000	20000AID
MAXIMUM				26.0	53.000	7.50	0.018	0.120	90.00	240.00	1250000	310000
ARITH MEAN				16.5	45.833	7.25	0.008	0.057	22.83	190.00	671667	85000
GEOM MEAN				15.8	45.684	7.25	0.007	0.052	13.26	187.62	525687	46354
MINIMUM				11.0	41.000	7.00	0.002	0.035	7.00	150.00	160000	20000
STD DEV (GEOM *)				5.4	4.119	0.22	0.005	0.032	33.03	33.47	2*	3*
# SAMP IN STATISTICS		6	6	6	6	6	6	6	6	6	6	6
% SAMP (EXCLUDED)												

(CONTD)

1983 WATER QUALITY DATA REGION 6

119

B.O.W./ SITE: KAMINISTQUIA RIVER
 SAMPLE POINT: MIDDLE OF TURNING BASIN
 STATION TYPE: RIVER

STATION ID: 01-0108-003-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: KAMINISTQUIA RIVER

STORET CODE: 02
 001
 7920

LAT: 48 20 44.03 LONG: 089 18 05.06 U T M: 16 0329475.0 5357050.0 4 REGION: 06 DISTANCE: 8.047

*=INTERIM TEST-NAME: TURB

SAMPLE DATE YYMMDD	HOUR LMT	SAMPLE NUMBER	TURB'ITY FTU
830516	1305	10062	8.30
830613		10084	5.10
830705	1325	10108	57.00
830815	1242	10130	3.90
830919	1430	10154	5.90
831012	1325	10177	5.60
MAXIMUM			57.00
ARITH MEAN			14.30
GEOM MEAN			8.23
MINIMUM			3.90
STD DEV (GEOM *)			20.97
# SAMP IN STATISTICS			6
% SAMP (EXCLUDED)			

1983 WATER QUALITY DATA REGION 6

120

B.O.W./ SITE: KAMINISTIGUIA RIVER
 SAMPLE POINT: NEAR MOUTH THUNDER BAY
 STATION TYPE: RIVER

STATION ID: 01-0108-004-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: KAMINISTIGUIA RIVER

STORET CODE: 02
 001
 7920

LAT: 48 23 33.45 LONG: 089 13 07.53 U T M: 16 0335750.0 5362100.0 4 REGION: 06

*=INTERIM		TEST-NAME:	FWSADP	FGPROJ	ALKT	ASUT	BOD5	CCNAUR	CCNFUR	CDUT	CLIDUR	COLAP
SAMPLE	DATE	TIME	SAMPLE	PROJECT	ALK	ARSENIC	BOD	CYANIDE	CYANIDE	CADMIUM	CHLORIDE	COLOUR
DATE	TIME		DEPTH	SUB-PROJ	TOTAL	UNF.TOT.	5 DAY	AVAIL	FREE	UNF.TOT.	UNF.REAC	APPARENT
YYMMDD	LMT	NUMBER	M	CODE	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	HZU
					AS CAC03	AS AS	AS O	AS HCN	AS HCN	AS CD	AS CL-	
830110	1100	10002	0.30	0101	44.0	0.0010<	1.50	0.001<W	0.001<W	0.0080	4.600	23.000
830214	1035	10016	0.30	0101	45.0		1.00				2.500	13.000
830314	1105	10029	0.30	0101	42.0		2.10				5.100	46.000
830412	1100	10041	0.30	0101	52.0	0.0010<	2.90	0.001<W	0.001<W	0.0020	8.400	59.000
830516	1350	10064	0.30	0101	45.0	0.0010	3.80	0.001<W	0.001<W	0.0005<	14.000	113.000
830613		10086	0.30	0101	40.0		5.40				12.000	138.000
830705	1400	10109	0.30	0101	53.0	0.0010<	3.30	0.001<W	0.001<W	0.0005	7.900	114.000
830815	1330	10132	0.30	0101	41.0	0.0010<	2.70			0.0005	8.900	78.000
830919	1235	10156	0.30	0101	47.0	0.0010<	1.10	0.001<W	0.001<W	0.0005<	9.800	18.000
831012	1415	10179	0.30	0101	48.0		0.70				14.000	26.000
831114	1115	10193	0.30	0101	44.0		0.60				6.800	13.000
831212	1100	10206	0.30	0101	44.0		1.70				5.400	41.000
MAXIMUM			0.30		53.0	0.0010	5.40	0.001	0.001	0.0080	14.000	138.000
ARITH MEAN			0.30		45.4	0.0010	2.23	0.001<A	0.001<A	0.0027	8.283	56.833
GEOM MEAN					45.3		1.82	0.001<A	0.001<A		7.452	41.753
MINIMUM			0.30		40.0	0.0010	0.60	0.001	0.001	0.0005	2.500	13.000
STD DEV (GEOM *)					4.0		1.44	0.000<A	0.000<A		3.689	43.981
# SAMP IN STATISTICS			12		12	1	12	5	5	4	12	12
% SAMP (EXCLUDED)						83				33		
*=INTERIM		TEST-NAME:	COND25	COUT	CRUT	CUUT	DO	FCMF	FEUT	FVPH	FWSTRC	FWTEMP
SAMPLE	DATE	TIME	CONDUCT.	COBALT	CHROMIUM	COPPER	DISOLVED	COLIFORM	IRON			WATER
DATE	TIME		25C	UNF.TOT.	UNF.TOT.	UNF.TOT.	OXYGEN	MF	UNF.TOT.			TEMP
YYMMDD	LMT	NUMBER	UMHO/CM	MG/L	MG/L	MG/L	MG/L	CNT	MG/L	PH	STREAM	DEG.C
			AT 25 C	AS CO	AS CR	AS CU	AS O	/100ML	AS FE	FIELD	COND.	
830110	1100	10002	121.0	0.0020<	0.0020	0.0030	12.2	20AID	0.1800	7.1	4	0.1
830214	1035	10016	112.0			0.0020	13.2	4<	0.0460	7.1	4	0.5
830314	1105	10029	120.0			0.003	9.4	100AID	0.3000	7.5	4	1.1
830412	1100	10041	151.0	0.0020<	0.0030	0.0050	9.4	1100	1.4000	7.2	4	0.9
830516	1350	10064	181.0	0.0020<	0.0070	0.0040	6.0	100<	1.1000	7.0		10.0
830613		10086	174.0			0.0050	5.7	200AID	0.6800	6.8	9	14.5
830705	1400	10109	145.0	0.0020<	0.0170	0.0110	6.8	2000AID	4.6000	7.3	3	15.5
830815	1330	10132	134.0	0.0020<	0.0040	0.0030	2.5	2000AID	0.5300	6.8		20.0
830919	1235	10156	141.0	0.0020<	0.0030	0.0030	8.5	2100	0.4400	7.1	9	13.0
831012	1415	10179	169.0			0.0040	8.8	400AID	0.4000			10.5
831114	1115	10193	122.0			0.0030	10.2	10<	0.2100	7.4	8	5.0
831212	1100	10206	125.0			0.0040	12.1	220C	1.1000	7.3	4 9	1.0

(C O N T D)

1983 WATER QUALITY DATA REGION 6

121

B.O.W./ SITE: KAMINISTIGUIA RIVER
 SAMPLE POINT: NEAR MOUTH THUNDER BAY
 STATION TYPE: RIVER

STATION ID: 01-0108-004-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: KAMINISTIGUIA RIVER

STORET CODE: 02
 001
 7920

LAT: 48 23 33.45 LONG: 089 13 07.53 U T M: 16 0335750.0 5362100.0 4 REGION: 06

*INTERIM TEST-NAME:		COND25	COU	CRUT	CUUT	DO	FCMF	FEUT	FWPH	FWSTRC	FWTEMP
		CONDUCT.	COBALT	CHROMIUM	COPPER	DISOLVED	FECAL	IRON			
		25C	UNF.TOT.	UNF.TOT.	UNF.TOT.	OXYGEN	COLIFORM	UNF.TOT.			
DATE	TIME	UMHO/CM	MG/L	MG/L	MG/L	MG/L	CFU	MG/L	PH	STREAM	WATER
YYMMDD	LMT	AT 25 C	AS CO	AS CR	AS CU	AS O	/100ML	AS FE	FIELD	COND.	TEMP
											DEG.C
		MAXIMUM	181.0	0.0170	0.0110	13.2	2100	4.6000	7.5		20.0
		ARITH MEAN	141.2	0.0060	0.004	8.7	904	0.9155	7.1		7.7
		GEOM MEAN	139.6	0.0045	0.004	8.1		0.5023	7.1		3.3
		MINIMUM	112.0	0.0020	0.0020	2.5	20	0.0460	6.8		0.1
		STD DEV (GEOM *)	23.2	0.0057	0.002	3.1		1.2339	0.2		7.1
		# SAMP IN STATISTICS	12	6	12	12	9	12	11		12
		% SAMP (EXCLUDED)					25				

*INTERIM TEST-NAME:		HARDT	MNUT	NIUT	PBUT	PH	PP04FR	PPUT	RSP	RST	TCHF	
		HARDNESS	MANGANESE	NICKEL	LEAD		PO4	PHOSPHOR			COLIFORM	
		TOTAL	UNF.TOT.	UNF.TOT.	UNF.TOT.		FIL.REAC	UNF.TOT.	RESIDUE	RESIDUE	TOTAL	
DATE	TIME	MG/L	MG/L	MG/L	MG/L		MG/L	MG/L	PARTIC.	TOTAL	MF	
YYMMDD	LMT	AS CAC03	AS MN	AS NI	AS PB	PH	AS P	AS P	MG/L	MG/L	CNT	
											/100ML	
830110	1100	10002	46.000	0.010	0.002 <	0.003<	7.30	0.001	0.019	4.00	85.00	100AID
830214	1035	10016	47.000	0.002			7.40	0.001<	0.011	1.00	90.00	130
830314	1105	10029	48.000	0.022			7.10	0.009	0.060	4.00	65.00	76000
830412	1100	10041	55.000	0.085	0.002	0.003<	7.00	0.006	0.077	15.00	140.00	10000
830516	1350	10064	53.000	0.044	0.002 <	0.003<	7.00	0.008	0.081	15.00	160.00	25000
830613		10086	46.000	0.049			6.80	0.005	0.081	15.00	140.00	590000
830705	1400	10109	58.000	0.073	0.0050	0.003<	7.30	0.015	0.120	65.00	200.00	500000
830815	1330	10132	47.000	0.035	0.004	0.004	6.70			8.00	120.00	370000
830919	1235	10156	52.000	0.020	0.002 <	0.003<	7.40	0.006	0.052	5.00	120.00	34000
831012	1415	10179	58.000	0.026			7.40	0.008	0.028	4.00	140.00	5000AID
831114	1115	10193	49.000	0.007			7.10	0.002	0.014	1.00	80.00	60AID
831212	1100	10206	49.000	0.039			7.10	0.006	0.064	25.00	150.00	4600
		MAXIMUM	58.000	0.085	0.0050	0.004	7.40	0.015	0.120	65.00	200.00	590000
		ARITH MEAN	50.667	0.034	0.004	0.004	7.13	0.007	0.055	13.50	124.17	134574
		GEOM MEAN	50.494	0.024			7.13		0.043	7.01	118.34	10198
		MINIMUM	46.000	0.002	0.002	0.004	6.70	0.001	0.011	1.00	65.00	60
		STD DEV (GEOM *)	4.438	0.026			0.23		0.034	17.78	38.90	27*
		# SAMP IN STATISTICS	12	12	3	1	12	10	11	12	12	12
		% SAMP (EXCLUDED)			50	83		9				

(CONTD)

11

1983 WATER QUALITY DATA REGION 6

122

B.O.W./ SITE: KAMINISTIGUIA RIVER
 SAMPLE POINT: NEAR MOUTH THUNDER BAY
 STATION TYPE: RIVER

STATION ID: 01-0108-004-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: KAMINISTIGUIA RIVER

STORET CODE: 02
 001
 7920

LAT: 48 23 33.45 LONG: 089 13 07.53 U T M: 16 0335750.0 5362100.0 4 REGION: 06

*INTERIM TEST-NAME:		TCMFBK	TURB	ZNUT
		COLIFORM		
		TOTAL MF		ZINC
SAMPLE		BCKGRD		UNF.TOT.
DATE	HR	CNT	TURB'ITY	MG/L
YYMMDD LMT	SAMPLE	/100ML	FTU	AS ZN
	NUMBER			
830110	1100	10002	1300	2.10
830214	1035	10016	30AID	0.55
830314	1105	10029	1000AID	3.20
830412	1100	10041	23000	7.00
830516	1350	10064	2000AID	9.20
830613		10086	10000AID	6.20
830705	1400	10109	90000AID	52.00
830815	1330	10132	30000AID	3.60
830919	1235	10156	70000	1.80
831012	1415	10179	20000	2.90
831114	1115	10193	200	1.90
831212	1100	10206	1200	6.90
MAXIMUM		90000	52.00	0.0400
ARITH MEAN		20727	8.11	0.009
GEOM MEAN		3990	4.04	0.006
MINIMUM		30	0.55	0.0010
STD DEV (GEOM *)		12*	14.07	0.010
# SAMP IN STATISTICS		12	12	12
% SAMP (EXCLUDED)				

1983 WATER QUALITY DATA REGION 6

123

B.O.W./ SITE: KAMINISTIGUIA RIVER
 SAMPLE POINT: AT MISSION RIVER JUNCTION
 STATION TYPE: RIVER

STATION ID: 01-0108-005-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: KAMINISTIGUIA RIVER

STORET CODE: 02
 001
 7920

LAT: 48 22 07.81 LONG: 089 15 02.90

U T M: 16 0333300.0 5359525.0 4

REGION: 06

DISTANCE: 4.023

*INTERIM TEST-NAME:		FWSADP	FGPROJ	ALKT	ASUT	BOD5	CCNAUR	CCNFUR	CDUT	CLIDUR	COLAP	
SAMPLE DATE YYMMDD	HOURLMT	SAMPLE NUMBER	SAMPLE DEPTH M	PROJECT SUB-PROJ CODE	ALK TOTAL MG/L AS CACO3	ARSENIC UNF.TOT. MG/L AS AS	BOD 5 DAY TOT.DEM. MG/L AS O	CYANIDE AVAIL UNF.REAC MG/L AS HCN	CYANIDE FREE UNF.REAC MG/L AS HCN	CADMIUM UNF.TOT. MG/L AS CD	CHLORIDE UNF.REAC MG/L AS CL-	COLOUR APPARENT H2U
830110	1020	10001	0.30	0101	41.0	0.0010<	2.10	0.001<T	0.001<W	0.0024	5.500	41.000
830214	0955	10015	0.30	0101	35.0		7.40				7.700	
830314	0950	10028	0.30	0101	40.0		4.10				8.300	
830412	1000	10042	0.30	0101	45.0	0.0010<	5.00	0.001<W	0.001<W	0.0020	7.800	104.000
830516	1325	10063	0.30	0101	45.0	0.0010	5.00	0.001<W	0.001<W	0.0005<	14.000	142.000
830613		10085	0.30	0101	39.0		4.20				11.000	152.000
830705	1300	10107	0.30	0101	51.0	0.0010<	3.20	0.001<W	0.001<W	0.0005	5.300	163.000
830815	1225	10131	0.30	0101	38.0	0.0010<	4.00			0.0015	12.000	107.000
830919	1420	10155	0.30		39.0	0.0010<	3.60	0.001<W	0.001<W	0.0005<	9.500	79.000
831012	1320	10178	0.30	0101	43.0		5.80				14.000	136.000
831114	1140	10192	0.30	0101	38.0		6.20				11.000	122.000
831212	1010	10205	0.30	0101	38.0		6.00				11.000	133.000
		MAXIMUM	0.30		51.0	0.0010	7.40	0.001	0.001	0.0024	14.000	163.000
		ARITH MEAN	0.30		41.0	0.0010	4.72	0.001<A	0.001<A	0.0016	9.758	117.900
		GEOM MEAN			40.8		4.49	0.001<A	0.001<A		9.325	110.838
		MINIMUM	0.30		35.0	0.0010	2.10	0.001	0.001	0.0005	5.300	41.000
		STD DEV (GEOM *)			4.3		1.48	0.000<A	0.000<A		2.922	36.650
		# SAMP IN STATISTICS	12		12	1	12	5	5	4	12	10
		% SAMP (EXCLUDED)				83				33		

*INTERIM TEST-NAME:		COND25	COUT	CRUT	CUUT	DO	FCMF	FEUT	FWPH	FWSTRC	FWTEMP	
SAMPLE DATE YYMMDD	HOURLMT	SAMPLE NUMBER	CONDUCT. 25C UMHO/CM AT 25 C	COBALT UNF.TOT. MG/L AS CO	CHROMIUM UNF.TOT. MG/L AS CR	COPPER UNF.TOT. MG/L AS CU	DISOLVED OXYGEN MG/L AS O	FECAL COLIFORM HF CNT /100ML	IRON UNF.TOT. MG/L AS FE	PH FIELD	STREAM COND.	WATER TEMP DEG.C
830110	1020	10001	124.0	0.0020<	0.0030	0.0020	12.0	500	0.2500	7.1	4	0.1
830214	0955	10015	136.0			0.0040	11.8	290	0.4300	7.0	4	0.5
830314	0950	10028	140.0			0.0040	9.6	100C	0.6300	7.3	4	1.6
830412	1000	10042	137.0	0.0020<	0.0070	0.0060	11.8	1000AID	1.8000	7.2	9	2.0
830516	1325	10063	187.0	0.0020<	0.0150	0.0070	6.4	200C	4.0000	7.0	0	10.0
830613		10085	168.0			0.0040	7.4	200C	0.8400	7.3	9	16.5
830705	1300	10107	130.0	0.0020<	0.0180	0.0140	8.0	800AID	6.8000	7.5	3	15.5
830815	1225	10131	160.0	0.0020<	0.0240	0.0040	8.2	1000AID	0.6100	6.9		23.0
830919	1420	10155	184.0	0.0020<	0.0150	0.0050	4.2	400AID	1.4000	6.5	9	15.5
831012	1320	10178	206.0			0.0070	7.6	4000AID	1.6000		9	10.5
831114	1140	10192	167.0			0.0050	10.0	2100	1.2000	6.9	8	4.0
831212	1010	10205	175.0			0.0030	13.1	1200C	0.5000	6.9	4 9	1.0

(C O N T D)

1983 WATER QUALITY DATA REGION 6

124

B.O.W./ SITE: KAMINISTIGUIA RIVER
 SAMPLE POINT: AT MISSION RIVER JUNCTION
 STATION TYPE: RIVER

STATION ID: 01-0108-005-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: KAMINISTIGUIA RIVER

STORET CODE: 02
 001
 7920

LAT: 48 22 07.81 LONG: 089 15 02.90 U T M: 16 0333300.0 5359525.0 4 REGION: 06 DISTANCE: 4.023

*INTERIM TEST-NAME:		COND25	COU	CRUT	CUUT	DO	FCMF	FEUT	FWPH	FWSTRC	FWTEMP
		CONDUCT.	COBALT	CHROMIUM	COPPER	DISOLVED	FECAL	IRON			
SAMPLE		25C	UNF.TOT.	UNF.TOT.	UNF.TOT.	OXYGEN	COLIFORM	UNF.TOT.			WATER
DATE	HR	UMHO/CM	MG/L	MG/L	MG/L	MG/L	MF	MG/L	PH	STREAM	TEMP
YYMMDD	LMT	AT 25 C	AS CO	AS CR	AS CU	AS O	CNT	AS FE	FIELD	COND.	DEG.C
		MAXIMUM	206.0	0.0240	0.0140	13.1	4000	6.8000	7.5		23.0
		ARITH MEAN	159.5	0.0137	0.0054	9.2	982	1.6717	7.1		8.3
		GEOM MEAN	157.6	0.0113	0.0048	8.8	592	1.0712	7.0		3.7
		MINIMUM	124.0	0.0030	0.0020	4.2	100	0.2500	6.5		0.1
		STD DEV (GEOM *)	26.0	0.0076	0.0031	2.7	3*	1.9040	0.3		7.9
		# SAMP IN STATISTICS	12	6	12	12	12	12	11		12
		% SAMP (EXCLUDED)									

*INTERIM TEST-NAME:		HARDT	MNUT	NIUT	PBUT	PH	PP04FR	PPUT	RSP	RST	TCMF	
		HARDNESS	MANGANESE	NICKEL	LEAD		P04	PHOSPHOR			COLIFORM	
SAMPLE		TOTAL	UNF.TOT.	UNF.TOT.	UNF.TOT.		FIL.REAC	UNF.TOT.	RESIDUE	RESIDUE	TOTAL	
DATE	HR	MG/L	MG/L	MG/L	MG/L		MG/L	MG/L	PARTIC.	TOTAL	MF	
YYMMDD	LMT	AS CACO3	AS MN	AS NI	AS PB	PH	AS P	AS P	MG/L	MG/L	CNT	
830110	1020	10001	45.000	0.017	0.002	0.003	7.30	0.003	0.041	5.00	80.00	3800
830214	0955	10015	41.000	0.029			7.00	0.004	0.038	5.00	140.00	5600
830314	0950	10028	46.000	0.043			7.10	0.015	0.039	3.00	130.00	340000
830412	1000	10042	51.000	0.064	0.002	0.003<	7.20	0.008	0.056	15.00	160.00	490000
830516	1325	10063	53.000	0.094	0.004	0.003<	7.00	0.011	0.130	75.00	230.00	190000
830613		10085	45.000	0.051			7.10	0.005	0.037	10.00	180.00	1070000
830705	1300	10107	58.000	0.110	0.0050	0.003<	7.50	0.020	0.120	95.00	230.00	380000
830815	1225	10131	47.000	0.049	0.005	0.004	6.90			10.00	200.00	1260000
830919	1420	10155	47.000	0.077	0.002	0.003<	6.80	0.006	0.081	20.00	200.00	120000
831012	1320	10178	55.000	0.076			7.00	0.006	0.073	15.00	220.00	150000
831114	1140	10192	44.000	0.052			6.70	0.007	0.072	10.00	170.00	25000
831212	1010	10205	47.000	0.044			7.00	0.015	0.046	4.00	190.00	98000
		MAXIMUM	58.000	0.110	0.005	0.004	7.50	0.020	0.130	95.00	230.00	1260000
		ARITH MEAN	48.250	0.059	0.003	0.003	7.05	0.009	0.067	22.25	177.50	344367
		GEOM MEAN	48.023	0.053	0.003		7.05	0.008	0.060	12.08	171.12	125467
		MINIMUM	41.000	0.017	0.002	0.003	6.70	0.003	0.037	3.00	80.00	3800
		STD DEV (GEOM *)	4.975	0.027	0.002		0.22	0.005	0.033	30.05	44.75	7*
		# SAMP IN STATISTICS	12	12	6	2	12	11	11	12	12	12
		% SAMP (EXCLUDED)				66						

(CONTD)

1983 WATER QUALITY DATA REGION 6

125

B.O.W./ SITE: KAMINISTIGUIA RIVER
 SAMPLE POINT: AT MISSION RIVER JUNCTION
 STATION TYPE: RIVER

STATION ID: 01-0108-005-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: KAMINISTIGUIA RIVER

STORET CODE: 02
 001
 7920

LAT: 48 22 07.81 LONG: 089 15 02.90

U T M: 16 0333300.0 5359525.0 4

REGION: 06

DISTANCE: 4.023

*INTERIM TEST-NAME:		TCMFBK	TURB	ZNUT	
		COLIFORM		ZINC	
		TOTAL HF		UNF.TOT.	
SAMPLE		BCKGRD		MG/L	
DATE	TIME	CNT	TURB'ITY		
YYMMDD	LMT	/100ML	FTU	AS ZN	
830110	1020	10001	6900	2.30	0.0100
830214	0955	10015	2200	3.40	0.0110
830314	0950	10028	10000<	3.70	0.0040
830412	1000	10042	10000AID	17.00	0.0110
830516	1325	10063	30000AID	32.00	0.0150
830613		10085	30000AID	6.30	0.0060
830705	1300	10107	120000	63.00	0.0210
830815	1225	10131	50000AID	2.40	0.0070
830919	1420	10155	40000AID	16.00	0.0070
831012	1320	10178	10000AID	7.80	0.010
831114	1140	10192	2000AID	3.20	0.008
831212	1010	10205	1000<	3.30	0.0060
MAXIMUM		120000	63.00	0.0210	
ARITH MEAN		30110	13.37	0.010	
GEOM MEAN			7.21	0.009	
MINIMUM		2000	2.30	0.0040	
STD DEV (GEOM *)			17.97	0.005	
# SAMP IN STATISTICS		10	12	12	
% SAMP (EXCLUDED)		16			

1983 WATER QUALITY DATA REGION 6

126

B.O.W./ SITE: MC KELLAR RIVER
 SAMPLE POINT: AT 104TH AVE THUNDER BAY
 STATION TYPE: RIVER

STATION ID: 01-0109-001-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: MC KELLAR RIVER

STORET CODE: 02
 001
 7930

LAT: 48 22 37.69 LONG: 089 14 25.32

U T M: 16 0334100.0 5360425.0 4

REGION: 06

DISTANCE: 2.414

*=INTERIM	TEST-NAME:	FWSADP	FGPROJ	ALKT	ASUT	BOD5	CCNAUR	CCNFUR	CDUT	CLIDUR	COLAP
				ALK	ARSENIC	BOD	CYANIDE	CYANIDE	CADMIUM	CHLORIDE	COLOUR
SAMPLE		SAMPLE	PROJECT	TOTAL	UNF.TOT.	5 DAY	AVAIL	FREE	UNF.TOT.	UNF.REAC	COLOUR
DATE HOUR		DEPTH	SUB-PROJ	MG/L	MG/L	TOT.DEM.	UNF.REAC	UNF.REAC	MG/L	MG/L	APPARENT
YYMMDD LMT	SAMPLE	M	CODE	AS CACO3	AS AS	AS O	AS HCN	AS HCN	AS CD	AS CL-	HZU
830110 1110	10004	0.30	0101	47.0		1.10				4.800	29.000
830214 1045	10018	0.30	0101	36.0		5.50				6.700	81.000
830314 1055	10031	0.30	0101	38.0		3.20				7.000	73.000
830412 1110	10045	0.30	0101	46.0	0.0010<	5.70	0.001<W	0.001<W	0.0020	8.100	88.000
830516 1340	10066	0.30	0101	46.0		3.90				15.000	107.000
830613	10088	0.30	0101	42.0		5.00				12.000	140.000
830705 1345	10111	0.30	0101	53.0	0.0010	3.40			0.0010	6.300	136.000
830815 1305	10134	0.30	0101	39.0	0.0010<	4.10			0.0005	7.400	86.000
830919 1450	10158	0.30	0101	45.0		1.80				11.000	46.000
831012 1410	10181	0.30	0101	46.0		1.30				11.000	38.000
831114 1130	10195	0.30	0101	45.0		1.80				8.600	46.000
831212 1135	10208	0.30	0101	43.0		3.40				10.000	98.000
	MAXIMUM	0.30		53.0	0.0010	5.70	0.001	0.001	0.0020	15.000	140.000
	ARITH MEAN	0.30		43.8	0.0010	3.35	0.001<A	0.001<A	0.0012	8.992	80.667
	GEOM MEAN			43.6		2.95			0.0010	8.580	72.426
	MINIMUM	0.30		36.0	0.0010	1.10	0.001	0.001	0.0005	4.800	29.000
	STD DEV (GEOM *)			4.6		1.59			0.0008	2.888	36.445
	# SAMP IN STATISTICS	12		12	1	12	1	1	3	12	12
	% SAMP (EXCLUDED)				66						

*=INTERIM	TEST-NAME:	COND25	COUT	CRUT	CUUT	DO	FCMF	FEUT	FMPH	FWSTRC	FWTEHP
		CONDUCT.	COBALT	CHROMIUM	COPPER	DISOLVED	COLIFORM	IRON			
SAMPLE		25C	UNF.TOT.	UNF.TOT.	UNF.TOT.	OXYGEN	MF	UNF.TOT.			WATER
DATE HOUR		UMHO/CM	MG/L	MG/L	MG/L	MG/L	CNT	MG/L	PH	STREAM	TEMP
YYMMDD LMT	SAMPLE	AT 25 C	AS CO	AS CR	AS CU	AS O	/100ML	AS FE	FIELD	COND.	DEG.C
830110 1110	10004	127.0				11.3	40AID		7.2	4	0.1
830214 1045	10018	130.0				11.6	270		6.8	4	0.5
830314 1055	10031	126.0			0.0050	7.9	90C	0.3300	7.0	4	1.8
830412 1110	10045	139.0	0.0020<	0.0040	0.0050	10.2	1000AID	1.7000	7.1	9	2.0
830516 1340	10066	183.0				5.6	100<		6.9	0	10.0
830613	10088	170.0			0.0040	6.3	300AID	0.7000	6.9	0	15.0
830705 1345	10111	139.0	0.0030	0.0120	0.0150	7.1	600AID	5.5000	7.5		16.0
830815 1305	10134	155.0	0.0020<	0.0160	0.0070	3.6	4000AID	0.7700	6.9		22.0
830919 1450	10158	164.0				4.7	300AID		6.9		14.0
831012 1410	10181	163.0			0.0060	7.7	900AID	0.6400			11.5
831114 1130	10195	141.0			0.0040	8.2	800AID	0.5700	6.7	8	4.5
831212 1135	10208	169.0			0.0050	12.0	100AID	0.9100	7.0	4	1.0

(C O N T D)

1983 WATER QUALITY DATA REGION 6

127

B.O.W./ SITE: MC KELLAR RIVER
 SAMPLE POINT: AT 104TH AVE THUNDER BAY
 STATION TYPE: RIVER

STATION ID: 01-0109-001-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: MC KELLAR RIVER

STORET CODE: 02
 001
 7930

LAT: 48 22 37.69 LONG: 089 14 25.32

U T M: 16 0334100.0 5360425.0 4

REGION: 06

DISTANCE: 2.414

*INTERIM TEST-NAME:		COND25	COUT	CRUT	CUUT	DO	FCMF	FEUT	FVPH	FWSTRC	FWTEMP
		CONDUCT.	COBALT	CHROMIUM	COPPER	DISOLVED	FECAL	IRON			
SAMPLE		25C	UNF.TOT.	UNF.TOT.	UNF.TOT.	OXYGEN	COLIFORM	UNF.TOT.			WATER
DATE	HR	UMHO/CM	MG/L	MG/L	MG/L	MG/L	HF	MG/L	PH	STREAM	TEMP
YYMMDD	LMT	AT 25 C	AS CO	AS CR	AS CU	AS O	CNT	AS FE	FIELD	COND.	DEG.C
		MAXIMUM	183.0	0.0030	0.0160	0.0150	12.0	4000	5.5000	7.5	22.0
		ARITH MEAN	150.5	0.0030	0.0107	0.0064	8.0	764	1.3900	7.0	8.2
		GEOM MEAN	149.4		0.0092	0.0058	7.5		0.9284	7.0	3.7
		MINIMUM	126.0	0.0030	0.0040	0.0040	3.6	40	0.3300	6.7	0.1
		STD DEV (GEOM *)	19.2		0.0061	0.0036	2.8		1.7087	0.2	7.5
		# SAMP IN STATISTICS	12	1	3	8	12	11	8	11	12
		% SAMP (EXCLUDED)		66				8			
*INTERIM TEST-NAME:		HARDT	MNUT	NIUT	PBUT	PH	PP04FR	PPUT	RSP	RST	TCMF
		HARDNESS	MANGANESE	NICKEL	LEAD		PO4	PHOSPHOR			COLIFORM
SAMPLE		TOTAL	UNF.TOT.	UNF.TOT.	UNF.TOT.		FIL.REAC	UNF.TOT.	RESIDUE	RESIDUE	TOTAL
DATE	HR	MG/L	MG/L	MG/L	MG/L		MG/L	MG/L	PARTIC.	TOTAL	HF
YYMMDD	LMT	AS CACO3	AS MN	AS NI	AS PB	PH	AS P	AS P	MG/L	MG/L	CNT
											/100ML
830110	1110	10004	49.000			7.80	0.001	0.025	2.00	90.00	200AID
830214	1045	10018	43.000			7.00	0.003	0.045	4.00	140.00	5300
830314	1055	10031	42.000	0.023		6.80	0.006	0.051	5.00	120.00	36000
830412	1110	10045	47.000	0.060	0.002 <	7.20	0.006	0.082	20.00	140.00	230000
830516	1340	10066	53.000			6.90	0.012	0.130	25.00	180.00	48000
830613		10088	46.000	0.050		6.90	0.006	0.054	10.00	170.00	570000
830705	1345	10111	59.000	0.920	0.0080	7.40	0.018	0.100	80.00	220.00	400000
830815	1305	10134	45.000	0.049	0.005	6.70	0.014	0.076	15.00	180.00	530000
830919	1450	10158	53.000			6.90	0.007	0.076	10.00	150.00	24000
831012	1410	10181	54.000	0.031		7.20	0.012	0.057	6.00	170.00	4000AID
831114	1130	10195	49.000	0.027		6.90	0.004	0.071	4.00	130.00	6100
831212	1135	10208	49.000	0.048		6.90	0.053	0.067	10.00	180.00	7100
		MAXIMUM	59.000	0.920	0.0080	7.80	0.053	0.130	80.00	220.00	570000
		ARITH MEAN	49.083	0.151	0.006	7.05	0.012	0.069	15.92	155.83	155058
		GEOM MEAN	48.857	0.058		7.04	0.008	0.064	9.55	152.08	27785
		MINIMUM	42.000	0.023	0.005	6.70	0.001	0.025	2.00	90.00	200
		STD DEV (GEOM *)	4.963	0.311		0.31	0.014	0.027	21.33	34.50	11*
		# SAMP IN STATISTICS	12	8	2	12	12	12	12	12	12
		% SAMP (EXCLUDED)			33	66					

(C O N T D)

1983 WATER QUALITY DATA REGION 6

128

B.O.W./ SITE: MC KELLAR RIVER
 SAMPLE POINT: AT 104TH AVE THUNDER BAY
 STATION TYPE: RIVER

STATION ID: 01-0109-001-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: MC KELLAR RIVER

STORET CODE: 02
 001
 7930

LAT: 48 22 37.69 LONG: 089 14 25.32

U T M: 16 0334100.0 5360425.0 4

REGION: 06

DISTANCE: 2.414

*INTERIM TEST-NAME:		TCMFBK	TURB	ZNUT
		COLIFORM		ZINC
		TOTAL MF		UNF.TOT.
		BCKGRD		MG/L
SAMPLE		CNT	TURB*ITY	AS ZN
DATE	HR		FTU	
YYMMDD	LMT	NUMBER		
830110	1110	10004	2800	1.60
830214	1045	10018	2000	3.10
830314	1055	10031	3000AID	3.60
830412	1110	10045	10000<	18.00
830516	1340	10066	7000AID	18.00
830613		10088	20000AID	0.55
830705	1345	10111	70000AID	59.00
830815	1305	10134	30000AID	4.40
830919	1450	10158	60000	4.40
831012	1410	10181	13000	4.80
831114	1130	10195	21000	2.10
831212	1135	10208	1000	3.50
		MAXIMUM	70000	59.00
		ARITH MEAN	20891	10.25
		GEOM MEAN		4.74
		MINIMUM	1000	0.55
		STD DEV (GEOM *)		16.43
		# SAMP IN STATISTICS	11	12
		% SAMP (EXCLUDED)	8	8

1983 WATER QUALITY DATA REGION 6

129

B.O.W./ SITE: MC KELLAR RIVER
 SAMPLE POINT: NEAR MOUTH CITY OF THUNDER BAY
 STATION TYPE: RIVER

STATION ID: 01-0109-002-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: MC KELLAR RIVER

STORET CODE: 02
 001
 7930

LAT: 48 22 38.68 LONG: 089 13 34.32 U T M: 16 0335150.0 5360425.0 4 REGION: 06 DISTANCE: 0.161

*INTERIM TEST-NAME:		FWSADP	FGPROJ	ALKT	ASUT	BOD5	CCNAUR	CCNFUR	CDUT	CLIDUR	COLAP	
						BOD 5 DAY	CYANIDE AVAIL	CYANIDE FREE				
SAMPLE DATE YYMMDD	HOUR LMT	SAMPLE NUMBER	SAMPLE DEPTH M	PROJECT SUB-PROJ CODE	ALK TOTAL MG/L AS CACO3	UNF.TOT. MG/L AS AS	TOT.DEM. MG/L AS O	UNF.REAC MG/L AS HCN	UNF.REAC MG/L AS HCN	CADMIUM UNF.TOT. MG/L AS CD	CHLORIDE UNF.REAC MG/L AS CL-	COLOUR APPARENT HZU
830110	1025	10005	0.30	0101	44.0	0.0010<	2.30	0.001<W	0.001<W	0.0032	5.500	43.000
830214	1015	10019	0.30	0101	44.0		0.40				3.100	22.000
830314	1050	10032	0.30	0101	39.0		2.00				4.100	33.000
830412	1030	10044	0.30	0101	51.0	0.0010<	4.60			0.0010	13.000	91.000
830516	1330	10067	0.30	0101	45.0	0.0010	4.00	0.001<W	0.001<W	0.0005<	14.000	127.000
830613		10089	0.30	0101	42.0		3.10				11.000	141.000
830705	1350	10112	0.30	0101	53.0	0.0010<	2.60	0.001<W	0.001<W	0.0010	15.000	119.000
830815	1315	10135	0.30	0101	40.0	0.0010<	2.40			0.0005	8.100	67.000
830919	1500	10159	0.30	0101	43.0	0.0010<	2.00	0.001<W	0.001<W	0.0005<	7.900	56.000
831012	1400	10182	0.30	0101	48.0		1.90				15.000	52.000
831114	1050	10196	0.30	0101	45.0		1.60				11.000	62.000
831212	1040	10209	0.30	0101	45.0		0.90				3.800	19.000
MAXIMUM		0.30			53.0	0.0010	4.60	0.001	0.001	0.0032	15.000	141.000
ARITH MEAN		0.30			44.9	0.0010	2.32	0.001<A	0.001<A	0.0014	9.292	69.333
GEOM MEAN					44.7		1.98	0.001<A	0.001<A		8.137	57.803
MINIMUM		0.30			39.0	0.0010	0.40	0.001	0.001	0.0005	3.100	19.000
STD DEV (GEOM *)					4.1		1.18	0.000<A	0.000<A		4.473	41.256
# SAMP IN STATISTICS		12			12	1	12	4	4	4	12	12
% SAMP (EXCLUDED)						83				33		

*INTERIM TEST-NAME:		COND25	COBT	CRUT	CUUT	DO	FCMF	FEUT	FWPH	FWSTRC	FWTEMP	
							FECAL					
SAMPLE DATE YYMMDD	HOUR LMT	SAMPLE NUMBER	CONDUCT. 25C UMHO/CM AT 25 C	COBALT UNF.TOT. MG/L AS CO	CHROMIUM UNF.TOT. MG/L AS CR	COPPER UNF.TOT. MG/L AS CU	DISSOLVED OXYGEN MG/L AS O	COLIFORM MF CNT /100ML	IRON UNF.TOT. MG/L AS FE	PH FIELD	STREAM COND.	WATER TEMP DEG.C
830110	1025	10005	128.0	0.0020<	0.0030	0.0030	11.0	1500	0.3100	7.2	4	0.5
830214	1015	10019	115.0			0.0020	12.6	16	0.0920	7.0	4	0.1
830314	1050	10032	109.0			0.0070	9.1	4<	0.4300	7.3	4	1.0
830412	1030	10044	186.0	0.0020<	0.0050	0.0050	9.2	230	1.6000	7.2	4	0.5
830516	1330	10067	184.0	0.0020<	0.0120	0.0050	4.6	50C	1.5000	6.9	8	10.0
830613		10089	162.0			0.0040	4.1	40C	0.6400	6.8	8	15.0
830705	1350	10112	180.0	0.0030	0.0150	0.0100	5.1	900AID	4.0000	7.1		16.0
830815	1315	10135	134.0	0.0020<	0.0050	0.0030	8.8	110C	0.5000	6.9		22.0
830919	1500	10159	144.0	0.0020<	0.0090	0.0050	3.8	20AID		7.0		14.0
831012	1400	10182	189.0			0.0040	4.1	230	0.8800			11.5
831114	1050	10196	162.0			0.0030	8.9	30AID	0.5900	7.0	8	3.0
831212	1040	10209	112.0			0.0030	13.1	40AID	0.2900	7.1	4	1.0

(C O N T D)

1983 WATER QUALITY DATA REGION 6

130

B.O.W./ SITE: MC KELLAR RIVER
 SAMPLE POINT: NEAR MOUTH CITY OF THUNDER BAY
 STATION TYPE: RIVER

STATION ID: 01-0109-002-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: MC KELLAR RIVER

STORET CODE: 02
 001
 7930

LAT: 48 22 38.68 LONG: 089 13 34.32

U T M: 16 0335150.0 5360425.0 4

REGION: 06

DISTANCE: 0.161

*INTERIM TEST-NAME:		COND25	COUT	CRUT	CUUT	DO	FCMF FECAL COLIFORM MF CNT /100ML	FEUT	FPH	FWSTRC	FWTEMP
SAMPLE		CONDUCT. 25C UMHO/CM AT 25 C	COBALT UNF.TOT. MG/L AS CO	CHROMIUM UNF.TOT. MG/L AS CR	COPPER UNF.TOT. MG/L AS CU	DISOLVED OXYGEN MG/L AS O	IRON UNF.TOT. MG/L AS FE	PH FIELD	STREAM COND.	WATER TEMP DEG.C	
DATE	HOUR	SAMPLE NUMBER									
YYMMDD	LMT										
MAXIMUM		189.0	0.0030	0.0150	0.0100	13.1	1500	4.0000	7.3		22.0
ARITH MEAN		150.4	0.0030	0.0082	0.0045	7.9	288	0.9847	7.0		7.9
GEOM MEAN		147.5		0.0070	0.0041	7.1		0.6249	7.0		3.0
MINIMUM		109.0	0.0030	0.0030	0.0020	3.8	16	0.0920	6.8		0.1
STD DEV (GEOM *)		30.6		0.0047	0.0022	3.4		1.1090	0.2		7.7
# SAMP IN STATISTICS		12	1	6	12	12	11	11	11		12
% SAMP (EXCLUDED)			83				8				

*INTERIM TEST-NAME:		HARDT	MNUT	NIUT	PBUT	PH	PP04FR	PPUT	RSP	RST	TCMF COLIFORM TOTAL MF CNT /100ML
SAMPLE		HARDNESS TOTAL MG/L AS CACO3	MANGANESE UNF.TOT. MG/L AS MN	NICKEL UNF.TOT. MG/L AS NI	LEAD UNF.TOT. MG/L AS PB	PH	P04 FIL.REAC MG/L AS P	PHOSPHOR UNF.TOT. MG/L AS P	RESIDUE PARTIC. MG/L	RESIDUE TOTAL MG/L	
DATE	HOUR	SAMPLE NUMBER									
YYMMDD	LMT										
830110	1025	10005	44.000	0.018	0.002 <	0.006	7.30	0.003	0.053	6.00	10000
830214	1015	10019	47.000	0.006			7.30	0.001<	0.017	1.00	360
830314	1050	10032	42.000	0.041			7.00	0.003	0.031	8.00	9000AID
830412	1030	10044	61.000	0.092	0.002 <	0.003<	6.70	0.009	0.059	7.00	5800
830516	1330	10067	51.000	0.065	0.002 <	0.003<	6.90	0.009	0.090	15.00	35000
830613		10089	46.000	0.047			6.80	0.005	0.057	9.00	163000
830705	1350	10112	62.000	0.070	0.0020	0.003<	7.20	0.015	0.100	60.00	410000
830815	1315	10135	47.000	0.034	0.003	0.003<	7.00	0.018	0.060	7.00	140000
830919	1500	10159	47.000		0.002 <	0.003<	6.90	0.008	0.071	8.00	3000AID
831012	1400	10182	59.000	0.057			6.90	0.016	0.071	7.00	2500
831114	1050	10196	53.000	0.024			7.00	0.004	0.037	3.00	110.00
831212	1040	10209	47.000	0.019			7.20	0.003	0.022	5.00	95.00
MAXIMUM		62.000	0.092	0.003	0.006	7.30	0.018	0.100	60.00	210.00	410000
ARITH MEAN		50.500	0.043	0.002	0.006	7.02	0.008	0.056	11.33	131.25	65138
GEOM MEAN		50.102	0.034			7.01		0.049	7.09	124.75	9552
MINIMUM		42.000	0.006	0.0020	0.006	6.70	0.003	0.017	1.00	70.00	360
STD DEV (GEOM *)		6.776	0.026			0.19		0.026	15.70	43.02	9*
# SAMP IN STATISTICS		12	11	2	1	12	11	12	12	12	12
% SAMP (EXCLUDED)				66	83		8				

(CONTD)

1983 WATER QUALITY DATA REGION 6

131

B.O.W./ SITE: MC KELLAR RIVER
 SAMPLE POINT: NEAR MOUTH CITY OF THUNDER BAY
 STATION TYPE: RIVER

STATION ID: 01-0109-002-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: MC KELLAR RIVER

STORET CODE: 02
 001
 7930

LAT: 48 22 38.68 LONG: 089 13 34.32 U T M: 16 0335150.0 5360425.0 4 REGION: 06 DISTANCE: 0.161

*INTERIM TEST-NAME:		TCHFBK	TURB	ZNUT	
		COLIFORM			
		TOTAL MF		ZINC	
SAMPLE		BCKGRD		UNF.TOT.	
DATE	HOUR	CNT	TURB'ITY	MG/L	
YYMMDD	LMT	NUMBER	FTU	AS ZN	
830110	1025	10005	52000	2.80	0.0220
830214	1015	10019	160	0.80	0.0060
830314	1050	10032	1000<	2.20	0.0070
830412	1030	10044	2600	6.70	0.0060
830516	1330	10067	10000	16.00	0.0050
830613		10089	7000AID	0.50	0.0050
830705	1350	10112	130000	52.00	0.0150
830815	1315	10135	10000AID	3.20	0.0040
830919	1500	10159	10000	5.30	0.0040
831012	1400	10182	14000	4.60	0.007
831114	1050	10196	1000	2.60	0.004
831212	1040	10209	200AID	1.90	0.0030
MAXIMUM		130000	52.00	0.0220	
ARITH MEAN		21542	8.22	0.007	
GEOM MEAN			3.63	0.006	
MINIMUM		160	0.50	0.0030	
STD DEV (GEOM *)			14.39	0.006	
# SAMP IN STATISTICS		11	12	12	
% SAMP (EXCLUDED)		8			

1983 WATER QUALITY DATA REGION 6

132

B.O.W./ SITE: MISSION RIVER
 SAMPLE POINT: NEAR MOUTH
 STATION TYPE: RIVER

STATION ID: 01-0110-001-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: MISSION RIVER

STORET CODE: 02
 001
 7940

LAT: 48 21 32.96 LONG: 089 13 41.17

U T M: 16 0334950.0 5358400.0 4

REGION: 06

DISTANCE: 0.322

*INTERIM TEST-NAME:			FWSADP	FGPROJ	ALKT	ASUT	BOD5	CCNAUR	CCNFUR	CDUT	CLIDUR	COLAP
					ALK	ARSENIC	BOD	CYANIDE	CYANIDE			
SAMPLE			SAMPLE	PROJECT	TOTAL	UNF.TOT.	5 DAY	AVAIL	FREE	CADMIUM	CHLORIDE	
DATE	HOUR	SAMPLE	DEPTH	SUB-PROJ	MG/L	MG/L	TOT.DEM.	MG/L	UNF.REAC	UNF.REAC	UNF.TOT.	UNF.REAC
YYMMDD	LMT	NUMBER	M	CODE	AS CAC03	AS AS	AS O	AS HCN	AS HCN	AS CD	AS CL-	COLOUR
830110	1040	10006	0.30	0101	40.0	0.0010<	5.50	0.001<T	0.001<W	0.0029	8.000	
830214	1005	10020	0.30	0101	34.0		10.00				9.600	
830314	1040	10033	0.30	0101	39.0		4.60				8.100	
830412	1020	10046	0.30	0101	45.0	0.0010<	4.80	0.001<W	0.001<W	0.0020	8.100	106.000
830516	1250	10068	0.30	0101	46.0	0.0010	5.80	0.001<W	0.001<W	0.0005<	14.000	152.000
830613		10090	0.30	0101	41.0		4.40				11.000	146.000
830705	1250	10113	0.30	0101	53.0	0.0010<	3.10	0.001<W	0.001<W	0.0005	5.800	164.000
830815	1215	10136	0.30	0101	38.0	0.0010<	3.40			0.0005	9.300	93.000
830919	1410	10160	0.30	0101	40.0	0.0010<	3.40	0.001<W	0.001<W	0.0005<	15.000	78.000
831012	1315	10183	0.30	0101	45.0		4.10				15.000	107.000
831114	1030	10197	0.30	0101	39.0		4.40				12.000	116.000
831212	1100	10210	0.30	0101	38.0		5.80				11.000	138.000
MAXIMUM			0.30		53.0	0.0010	10.00	0.001	0.001	0.0029	15.000	164.000
ARITH MEAN			0.30		41.5	0.0010	4.94	0.001<A	0.001<A	0.0015	10.575	122.222
GEOM MEAN					41.2		4.70	0.001<A	0.001<A		10.183	119.022
MINIMUM			0.30		34.0	0.0010	3.10	0.001	0.001	0.0005	5.800	78.000
STD DEV (GEOM *)					5.0		1.83	0.000<A	0.000<A		2.978	29.132
# SAMP IN STATISTICS			12		12	1	12	5	5	4	12	9
% SAMP (EXCLUDED)						83				33		

*INTERIM TEST-NAME:		COND25	COUT	CRUT	CUUT	DO	FCMF	FEUT	FWPH	FWSTRC	FWTEMP
		CONDUCT. 25C	COBALT UNF.TOT. MG/L	CHROMIUM UNF.TOT. MG/L	COPPER UNF.TOT. MG/L	DISOLVED OXYGEN MG/L	COLIFORM FECAL HF CNT /100ML	IRON UNF.TOT. MG/L	PH	STREAM COND.	WATER TEMP DEG.C
SAMPLE DATE	HOUR	SAMPLE NUMBER	UMHO/CM AT 25 C	AS CO	AS CR	AS CU	AS O	AS FE	FIELD		
830110	1040	10006	146.0	0.0020<	0.0070	0.0020	12.2	300AID	0.3600	7.0	4
830214	1005	10020	165.0			0.0050	12.5	76	0.4200	7.0	4
830314	1040	10033	140.0			0.004	10.0	100<	0.430	7.2	9
830412	1020	10046	139.0	0.0020	0.0050	0.0050	11.2	300C	1.5000	7.2	9
830516	1250	10068	193.0	0.0020<	0.0140	0.0050	5.4	100<	1.7000	7.1	0
830613		10090	167.0			0.0050	7.0	200C	0.7000	7.1	0
830705	1250	10113	136.0	0.0040	0.0130	0.0140	7.8	500AID	6.5000	7.4	
830815	1215	10136	146.0	0.0020<	0.0180	0.0040	8.2	30C	0.8100	6.9	
830919	1410	10160	182.0	0.0020	0.0180	0.0050	3.4	150C		6.8	
831012	1315	10183	205.0			0.0050	6.2	800AID	1.2000		
831114	1030	10197	175.0			0.0040	7.2	230	0.9200	6.8	9
831212	1100	10210	179.0			0.0040	12.0	800C	0.5300	7.1	

(CONT'D)

1983 WATER QUALITY DATA REGION 6

133

B.O.W./ SITE: MISSION RIVER
 SAMPLE POINT: NEAR MOUTH
 STATION TYPE: RIVER

STATION ID: 01-0110-001-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: MISSION RIVER

STORET CODE: 02
 001
 7940

LAT: 48 21 32.96 LONG: 089 13 41.17 U T M: 16 0334950.0 5358400.0 4 REGION: 06 DISTANCE: 0.322

*=INTERIM TEST-NAME:		COND25	COUT	CRUT	CUUT	DO	FCMF	FEUT	FMPH	FWSTRC	FWTEMP
		CONDUCT.	COBALT	CHROMIUM	COPPER	DISOLVED	FECAL	IRON			
		25C	UNF.TOT.	UNF.TOT.	UNF.TOT.	OXYGEN	COLIFORM	UNF.TOT.			
SAMPLE		UMHO/CM	MG/L	MG/L	MG/L	MG/L	MF	MG/L	PH	STREAM	WATER
DATE	HOUR	AT 25 C	AS CO	AS CR	AS CU	AS O	CNT	AS FE	FIELD	COND.	TEMP
YYMMDD	LMT						/100ML				DEG.C
		MAXIMUM	205.0	0.0040	0.0180	0.0140	800	6.5000	7.4		20.0
		ARITH MEAN	164.4	0.0027	0.0125	0.005	339	1.370	7.1		8.2
		GEOM MEAN	163.0		0.0113	0.005		0.911	7.1		4.1
		MINIMUM	136.0	0.0020	0.0050	0.0020	30	0.3600	6.8		0.5
		STD DEV (GEOM *)	23.0		0.0055	0.003	3.0	1.759	0.2		7.4
		# SAMP IN STATISTICS	12	3	6	12	10	11	11		12
		% SAMP (EXCLUDED)		50			16				

*=INTERIM TEST-NAME:		HARDT	MNUT	NIUT	PBUT	PH	PP04FR	PPUT	RSP'	RST	TCHM
		HARDNESS	MANGANESE	NICKEL	LEAD		P04	PHOSPHOR			COLIFORM
		TOTAL	UNF.TOT.	UNF.TOT.	UNF.TOT.		FIL.REAC	UNF.TOT.	RESIDUE	RESIDUE	TOTAL
SAMPLE		MG/L	MG/L	MG/L	MG/L		MG/L	MG/L	PARTIC.	TOTAL	MF
DATE	HOUR	AS CAC03	AS MN	AS NI	AS PB	PH	AS P	AS P	MG/L	MG/L	CNT
YYMMDD	LMT										/100ML
830110	1040	10006	44.000	0.026	0.002	0.004	7.20	0.003	0.051	7.00	5900
830214	1005	10020	46.000	0.034			7.10	0.003	0.038	8.00	7200
830314	1040	10033	44.000	0.041			7.10	0.017	0.036	6.00	670000
830412	1020	10046	47.000	0.069	0.002 <	0.003<	7.20	0.008	0.054	15.00	700000
830516	1250	10068	55.000	0.069	0.004	0.003<	7.00	0.008	0.069	20.00	57000
830613		10090	45.000	0.052			7.10	0.005	0.037	10.00	580000
830705	1250	10113	59.000	0.095	0.0060	0.003<	7.40	0.018	0.110	85.00	460000
830815	1215	10136	42.000	0.049	0.005	0.003	6.90	0.001	0.040	10.00	650000
830919	1410	10160	47.000		0.002	0.003<	6.80	0.003	0.071	15.00	25000
831012	1315	10183	55.000	0.056			6.90	0.006	0.071	15.00	130000
831114	1030	10197	46.000	0.920			6.60	0.006	0.078	15.00	8000AID
831212	1100	10210	45.000	0.050			6.90	0.012	0.043	5.00	260000
		MAXIMUM	59.000	0.920	0.0060	0.004	7.40	0.018	0.110	85.00	700000
		ARITH MEAN	47.917	0.133	0.004	0.003	7.02	0.007	0.058	17.58	296092
		GEOM MEAN	47.660	0.066			7.01	0.006	0.055	12.49	102413
		MINIMUM	42.000	0.026	0.002	0.003	6.60	0.001	0.036	5.00	5900
		STD DEV (GEOM *)	5.351	0.262			0.21	0.006	0.022	21.72	7*
		# SAMP IN STATISTICS	12	11	5	2	12	12	12	12	12
		% SAMP (EXCLUDED)			16	66					

(CONTD)

1983 WATER QUALITY DATA REGION 6

134

B.G.W./ SITE: MISSION RIVER
 SAMPLE POINT: NEAR MOUTH
 STATION TYPE: RIVER

STATION ID: 01-0110-001-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: LAKE SUPERIOR
 TERM STREAM: MISSION RIVER

STORET CODE: 02
 001
 7940

LAT: 48 21 32.96 LONG: 089 13 41.17 U T M: 16 0334950.0 5358400.0 4 REGION: 06 DISTANCE: 0.322

*=INTERIM TEST-NAME:		TCMFBK	TURB	ZNUT
		COLIFORM		
		TOTAL MF		ZINC
		BCKGRD		UNF.TOT.
SAMPLE		CNT	TURB'ITY	MG/L
DATE	HR		FTU	AS ZN
YYMMDD	LMT	SAMPLE		
		NUMBER		
		/100ML		
830110	1040	10006	8600	3.70
830214	1005	10020	2700	3.20
830314	1040	10033	40000AID	3.30
830412	1020	10046	10000AID	16.00
830516	1250	10068	12000	18.00
830613		10090	10000<	6.60
830705	1250	10113	120000	65.00
830815	1215	10136	20000AID	2.70
830919	1410	10160	20000	7.20
831012	1315	10183	13000	5.90
831114	1030	10197	4000AID	2.40
831212	1100	10210	10000<	3.10
		MAXIMUM	120000	65.00
		ARITH MEAN	25030	11.42
		GEOM MEAN		6.33
		MINIMUM	2700	2.40
		STD DEV (GEOM *)		17.65
		# SAMP IN STATISTICS	10	12
		% SAMP (EXCLUDED)	16	

MAJOR BASIN: ARCTIC DRAINAGE NELSON RIVER
MINOR BASIN: LAKE WINNIPEG EAST WINNIPEG RIVER

STORET CODE: 05
001

DISTANCE: 94.949

*INTERIM		TEST-NAME:	CRUT	CUUT	DO	FCMF	FEUT	FWPH	FWSTRC	FWTEMP	HARDT	HNUT
			CHROMIUM	COPPER	DISOLVED	FECAL	IRON				HARDNESS	MANGANSE
SAMPLE			UNF.TOT.	UNF.TOT.	OXYGEN	COLIFORM	UNF.TOT.			WATER	TOTAL	UNF.TOT.
DATE	HOUR	SAMPLE	MG/L	MG/L	MG/L	MF	MG/L		PH	TEMP	MG/L	MG/L
YYMMDD	LMT	NUMBER	AS CR	AS CU	AS O	CNT	AS FE	FIELD	STREAM	DEG.C	AS CAC03	AS MN
						/100ML			COND.			
830104	1030	11200		0.0010	12.0	4<	0.0950	7.0		0.5	58.000	0.005
830208	1415	11202	0.0020<	0.0030	11.5	288	0.0880	7.0	6	1.0	59.000	0.006
830307	1430	11204		0.0040	9.5	8	0.1400	7.0	6	0.5	55.000	0.009
830411	1200	11206		0.0030	8.5	4	0.1800	7.0	6	1.5	57.000	0.010
830509	0900	11208	0.0070	0.0010	9.0	4<	0.1500	7.0	6	5.0	55.000	0.010
830608	0900	11210		0.0030	9.5	4<	0.0790	7.1	6	12.0	55.000	0.007
830704	1330	11212	0.0020<	0.0010	9.0	16		7.1	6	17.0	56.000	0.005
830810	0900	11214		0.0020	7.0	4<	0.4500	7.1	6	24.0	54.000	0.013
830912		11216		0.0020	9.0	4<	0.0510	7.1	5	19.0	55.000	0.019
831011	1015	11218	0.0040	0.0020	10.0	4	0.0760	7.1	5	12.0	55.000	0.016
831114	1000	11220		0.0020	11.0	4	0.1300	7.1	6	4.0	56.000	0.010
831205	0939	11222		0.0020	12.0	8	0.1200	7.1	6	1.0	56.000	0.009

(C O N T D)

1983 WATER QUALITY DATA REGION 6

136

B.O.W./ SITE: WINNIPEG RIVER
 SAMPLE POINT: AT FIRST CPR BR.WEST OF MAIN ST.KENORA
 STATION TYPE: RIVER

STATION ID: 19-0001-001-02

MAJOR BASIN: ARCTIC DRAINAGE NELSON RIVER
 MINOR BASIN: LAKE WINNIPEG EAST WINNIPEG RIVER

STORET CODE: 05
 001

LAT: 49 46 13.83 LONG: 094 29 58.10

U T M: 15 0392025.0 5513975.0 4

REGION: 06

DISTANCE: 94.949

*=INTERIM TEST-NAME:			CRUT	CUUT	DO	FCMF FECAL COLIFORM MF	FEUT IRON UNF.TOT.	FMPH	FWSTRC	FWTEMP WATER TEMP	HARDT HARDNESS TOTAL	MNUT MANGANSE UNF.TOT.
DATE	HR	SAMPLE NUMBER	CHROMIUM UNF.TOT. MG/L AS CR	COPPER UNF.TOT. MG/L AS CU	DISOLVED OXYGEN MG/L AS O	CNT /100ML	MG/L AS FE	PH FIELD	STREAM COND.	DEG.C	AS CAC03	AS MN
MAXIMUM			0.0070	0.0040	12.0	288	0.4500	7.1		24.0	59.000	0.019
ARITH MEAN			0.0055	0.0022	9.8	47	0.1417	7.1		8.1	55.917	0.010
GEOM MEAN				0.0020	9.7		0.1190	7.1		3.8	55.900	0.009
MINIMUM			0.0040	0.0010	7.0	4	0.0510	7.0		0.5	54.000	0.005
STD DEV (GEOM *)				0.0009	1.5		0.1090	0.1		8.4	1.443	0.004
# SAMP IN STATISTICS			2	12	12	7	11	12		12	12	12
% SAMP (EXCLUDED)			50			41						
*=INTERIM TEST-NAME:			NIUT	NNHTFR NH3-N TOTAL	NN02FR NO2-N	NN03FR NO3-N	NNTKUR K'DAHL N TOTAL	PBUT LEAD	PH	PP04FR PO4 FIL.REAC	PPUT PHOSPHOR UNF.TOT.	RSP RESIDUE PARTIC.
DATE	HR	SAMPLE NUMBER	NICKEL UNF.TOT. MG/L AS NI	FIL.REAC MG/L AS N	FIL.REAC MG/L AS N	FIL.REAC MG/L AS N	UNF.REAC MG/L AS N	UNF.TOT. MG/L AS PB	PH	AS P	AS P	MG/L
830104	1030	11200		0.010	0.001	0.120	0.520		7.50	0.009	0.030	3.00
830208	1415	11202	0.002<	0.010<	0.002	0.180	0.470	0.003 <	7.30	0.012	0.022	1.00
830307	1430	11204		0.010	0.001	0.170	0.450		7.30	0.012	0.021	1.00
830411	1200	11206		0.010<	0.002	0.160	0.450		7.20	0.010	0.021	1.00
830509	0900	11208	0.002	0.010	0.003	0.080	0.540	0.003 <	7.80	0.002	0.026	3.00
830608	0900	11210		0.020	0.004	0.030	0.590		7.60	0.004	0.025	2.00
830704	1330	11212	0.002<	0.040	0.002	0.010	0.720	0.0030<	7.50	0.006	0.032	1.00
830810	0900	11214		0.050	0.002	0.003	0.500		7.60	0.007	0.020	3.00
830912		11216		0.010	0.002	0.010<	0.620		7.70	0.004	0.025	4.00
831011	1015	11218	0.002<	0.060	0.006	0.040	0.560	0.003 <	7.60	0.001	0.026	2.00
831114	1000	11220		0.010<	0.001	0.070	0.550		7.50	0.005	0.028	3.00
831205	0939	11222		0.010	0.002	0.010<	0.480		7.60	0.008	0.025	1.00
MAXIMUM			0.002	0.060	0.006	0.180	0.720		7.80	0.012	0.032	4.00
ARITH MEAN			0.002	0.024	0.002	0.086	0.537		7.52	0.007	0.025	2.08
GEOM MEAN					0.002		0.533		7.51	0.005	0.025	1.82
MINIMUM			0.002	0.010	0.001	0.003	0.450		7.20	0.001	0.020	1.00
STD DEV (GEOM *)					0.001		0.079		0.17	0.004	0.004	1.08
# SAMP IN STATISTICS			1	9	12	10	12		12	12	12	12
% SAMP (EXCLUDED)			75	25		16						

(CONT'D)

1983 WATER QUALITY DATA REGION 6

137

B.O.W./ SITE: WINNIPEG RIVER
 SAMPLE POINT: AT FIRST CPR BR.WEST OF MAIN ST.KENORA
 STATION TYPE: RIVER

STATION ID: 19-0001-001-02

MAJOR BASIN: ARCTIC DRAINAGE NELSON RIVER
 MINOR BASIN: LAKE WINNIPEG EAST WINNIPEG RIVER

STORET CODE: 05
 001

LAT: 49 46 13.83 LONG: 094 29 58.10

U T M: 15 0392025.0 5513975.0 4

REGION: 06

DISTANCE: 94.949

**INTERIM TEST-NAME:		RST	TCMF COLIFORM TOTAL MF CNT /100ML	TCMFBK COLIFORM TOTAL MF BCKGRD CNT /100ML	TURB TURB'ITY FTU	ZNUT ZINC UNF.TOT. MG/L AS ZN
SAMPLE DATE YYMMDD	HR LMT	SAMPLE NUMBER	RESIDUE TOTAL MG/L			
830104	1030	11200	110.00	10<	10AID	1.90
830208	1415	11202	100.00	2700	3500	1.80
830307	1430	11204	110.00	90AID	310	1.80
830411	1200	11206	75.00	190	690	2.20
830509	0900	11208	95.00	10<	80AID	1.70
830608	0900	11210	100.00	170	1200	1.00
830704	1330	11212	85.00	70AID	590	0.95
830810	0900	11214	110.00	20C	7000	0.65
830912		11216	140.00	170	2400	1.90
831011	1015	11218	130.00	370	400	1.20
831114	1000	11220	90.00	660	690	1.60
831205	0939	11222	100.00	60AID	300	1.60
MAXIMUM		140.00	2700	7000	2.20	0.0030
ARITH MEAN		103.75	450	1431	1.52	0.0015
GEOM MEAN		102.34		538	1.45	
MINIMUM		75.00	20	10	0.65	0.0010
STD DEV (GEOM *)		18.11		6*	0.47	
# SAMP IN STATISTICS		12	10	12	12	10
% SAMP (EXCLUDED)			16			16

1983 WATER QUALITY DATA REGION 6

: 138

B.O.W./ SITE: WINNIPEG RIVER
 SAMPLE POINT: NORTH-WEST OF OLD FORT ISLAND
 STATION TYPE: RIVER

STATION ID: 19-0001-002-02

MAJOR BASIN: ARCTIC DRAINAGE NELSON RIVER
 MINOR BASIN: LAKE WINNIPEG EAST WINNIPEG RIVER

STORET CODE: 05
 001

LAT: 49 47 06.67 LONG: 094 30 43.49

U T M: 15 0391150.0 5515625.0 4

REGION: 06

DISTANCE: 92.213

*INTERIM TEST-NAME:		FWSADP	FGPROJ	ALKT	ASUT	BOD5	CDUT	CLIDUR	COLAP	COND25	COUT
						BOD 5 DAY	CADMIUM	CHLORIDE		CONDUCT.	COBALT
						TOT.DEM.	UNF.TOT.	UNF.REAC	COLOUR	25C	UNF.TOT.
						MG/L	MG/L	MG/L	APPARENT	UMHO/CM	MG/L
						AS O	AS CD	AS CL-	HZU	AT 25 C	AS CO
SAMPLE DATE	HOURLMT	SAMPLE NUMBER	SAMPLE DEPTH M	PROJECT SUB-PROJ CODE	ALK TOTAL MG/L AS CAC03	ARSENIC UNF.TOT. MG/L AS AS					
YYMMDD											
830104	1130	11201	0.30	0101	53.0		2.80	3.200	41.000	136.0	
830208	1515	11203	0.30	0101	57.0	0.0010<	1.20	3.300	39.000	140.0	0.0020<
830307	1515	11205	0.30	0101	53.0		2.20	3.500	41.000	138.0	
830411	1330	11207	0.30	0101	56.0		1.40	3.000	45.000	130.0	
830509	0930	11209	0.30	0101	49.0	0.0010<	4.00	3.200	47.000	134.0	0.0020<
830608	0930	11211	0.30	0101	50.0		2.90	3.000	40.000	125.0	
830704	1400	11213	0.30	0101	51.0	0.0010<	3.40	2.900	33.000	124.0	0.0020<
830810	1030	11215	0.30	0101	47.0		17.00	4.000	35.000	147.0	
830912	1430	11217	0.30	0101	50.0		2.80	2.700	36.000	121.0	
831011	1130	11219	0.30	0101	48.0	0.0010<	16.00	3.400	43.000	149.0	0.0030
831114	1100	11221	0.30	0101	49.0		2.70	2.800	36.000	125.0	
831205	1100	11223	0.30	0101	49.0		1.70	2.900	34.000	122.0	
		MAXIMUM	0.30		57.0		17.00	4.000	47.000	149.0	0.0030
		ARITH MEAN	0.30		51.0		4.84	3.158	39.167	132.6	0.0030
		GEOM MEAN			50.9		3.26	3.140	38.935	132.3	
		MINIMUM	0.30		47.0		1.20	2.700	33.000	121.0	0.0030
		STD DEV (GEOM *)			3.1		5.51	0.360	4.469	9.6	
		# SAMP IN STATISTICS	12		12		12	12	12	12	1
		% SAMP (EXCLUDED)									75

*INTERIM TEST-NAME:		CRUT	CUUT	DO	FCMF	FEUT	FVPH	FWSTRC	FWTEMP	HARDT	HNUT
					FECAL						
					COLIFORM	IRON					
					MF	UNF.TOT.					
					CNT	MG/L					
					/100ML	AS FE					
SAMPLE DATE	HOURLMT	SAMPLE NUMBER	CHROMIUM UNF.TOT. MG/L AS CR	COPPER UNF.TOT. MG/L AS CU	DISOLVED OXYGEN MG/L AS O		PH FIELD	STREAM COND.	WATER TEMP DEG.C	HARDNESS TOTAL MG/L AS CAC03	MANGANESE UNF.TOT. MG/L AS MN
YYMMDD											
830104	1130	11201		0.0010	11.0	240	0.11	7.0	0.5	57.000	0.008
830208	1515	11203	0.0020<	0.0020	11.0	430	0.1100	7.0	1.0	58.000	0.006
830307	1515	11205		0.0030	7.0	3000AID	0.1300	6.9	0.5	59.000	0.011
830411	1330	11207		0.0030	8.0	600AID	0.1700	6.9	2.0	57.000	0.012
830509	0930	11209	0.0100	0.0030	7.5	400AID	0.1500	6.9	5.5	55.000	0.015
830608	0930	11211		0.0030	9.5	10<	0.1240	7.0	12.0	55.000	0.011
830704	1400	11213	0.0030	0.0030	8.5	30C		6.9	18.0	54.000	0.011
830810	1030	11215		0.0020	6.0	400AID	0.6000	6.9	25.0	54.000	0.025
830912	1430	11217		0.0020	8.5	10C	0.0640	7.0	19.0	54.000	0.022
831011	1130	11219	0.0040	0.0030	7.5	10<	0.0880	6.9	12.0	57.000	0.032
831114	1100	11221		0.0020	10.0	70AID	0.0970	7.0	4.5	55.000	0.013
831205	1100	11223		0.0020	8.0	200C	0.1200	7.0	1.0	56.000	0.013

(C O N T D)

1983 WATER QUALITY DATA REGION 6

139

B.O.W./ SITE: WINNIPEG RIVER
 SAMPLE POINT: NORTH-WEST OF OLD FORT ISLAND
 STATION TYPE: RIVER

STATION ID: 19-0001-002-02

MAJOR BASIN: ARCTIC DRAINAGE NELSON RIVER
 MINOR BASIN: LAKE WINNIPEG EAST WINNIPEG RIVER

STORET CODE: 05
 001

LAT: 49 47 06.67 LONG: 094 30 43.49

U T M: 15 0391150.0 5515625.0 4

REGION: 06

DISTANCE: 92.213

*INTERIM TEST-NAME:		CRUT	CUUT	DO	FCMF FECAL COLIFORM MF	FEUT	FWPH	FWSTRC	FWTEMP	HARDT	MNUT
		CHROMIUM UNF.TOT. MG/L AS CR	COPPER UNF.TOT. MG/L AS CU	DISSOLVED OXYGEN MG/L AS O	IRON UNF.TOT. MG/L AS FE		PH FIELD	STREAM COND.	WATER TEMP DEG.C	HARDNESS TOTAL MG/L AS CaCO3	MANGANESE UNF.TOT. MG/L AS MN
SAMPLE DATE YYMMDD	HOURL LHT	SAMPLE NUMBER									
		MAXIMUM	0.0100	0.0030	11.0	3000	0.6000	7.0	25.0	59.000	0.032
		ARITH MEAN	0.0057	0.0024	8.5	538	0.1603	6.9	8.4	55.917	0.015
		GEOM MEAN		0.0023	8.4		0.1310	6.9	4.0	55.894	0.013
		MINIMUM	0.0030	0.0010	6.0	10	0.0640	6.9	0.5	54.000	0.006
		STD DEV (GEOM *)		0.0007	1.6		0.1486	0.1	8.6	1.676	0.008
		# SAMP IN STATISTICS	3	12	12	10	11	12	12	12	12
		% SAMP (EXCLUDED)	25			16					

*INTERIM TEST-NAME:		NIUT	NNHTFR NH3-N TOTAL	NNO2FR NO2-N FIL.REAC	NNO3FR NO3-N FIL.REAC	NNTKUR K'DAHL N TOTAL	PBUT	PH	PP04FR PO4 FIL.REAC	PPUT	RSP
		NICKEL UNF.TOT. MG/L AS NI	FIL.REAC MG/L AS N	FIL.REAC MG/L AS N	FIL.REAC MG/L AS N	UNF.REAC MG/L AS N	LEAD UNF.TOT. MG/L AS PB	PH	PO4 FIL.REAC MG/L AS P	PHOSPHOR UNF.TOT. MG/L AS P	RESIDUE PARTIC. MG/L
SAMPLE DATE YYMMDD	HOURL LHT	SAMPLE NUMBER									
830104	1130	11201		0.010	0.002	0.030	0.510		7.50	0.003	0.035
830208	1515	11203	0.003	0.010<	0.003	0.110	0.490	0.003 <	7.70	0.002	0.021
830307	1515	11205		0.040	0.006	0.040	0.580		7.20	0.002	0.023
830411	1330	11207		0.010<	0.003	0.100	0.500		7.20	0.002	0.023
830509	0930	11209	0.003	0.010<	0.007	0.020	0.630	0.003 <	7.50	0.001<	0.031
830608	0930	11211		0.030	0.002	0.010<	0.590		7.30	0.001	0.025
830704	1400	11213	0.002<	0.010<	0.001	0.010<	0.550	0.0030<	7.30	0.002	0.044
830810	1030	11215		0.010<	0.003	0.017	0.560		6.80	0.001<	0.028
830912	1430	11217		0.010<	0.001	0.010<	0.660		7.30	0.002	0.031
831011	1130	11219	0.002<	0.010	0.002	0.020	0.660	0.003 <	7.00	0.001	0.032
831114	1100	11221		0.010<	0.001<	0.010<	0.620		7.30	0.003	0.032
831205	1100	11223		0.010	0.003	0.100	0.710		7.30	0.007	0.029
		MAXIMUM	0.003	0.040	0.007	0.110	0.710		7.70	0.007	0.044
		ARITH MEAN	0.003	0.020	0.003	0.055	0.588		7.28	0.002	0.029
		GEOM MEAN					0.585		7.28		0.029
		MINIMUM	0.003	0.010	0.001	0.017	0.490		6.80	0.001	0.021
		STD DEV (GEOM *)					0.070		0.23		0.006
		# SAMP IN STATISTICS	2	5	11	8	12		12	10	12
		% SAMP (EXCLUDED)	50	58	8	33				16	

(CONT'D)

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140

B.O.W./ SITE: WINNIPEG RIVER
 SAMPLE POINT: NORTH-WEST OF OLD FORT ISLAND
 STATION TYPE: RIVER

STATION ID: 19-0001-002-02

MAJOR BASIN: ARCTIC DRAINAGE NELSON RIVER
 MINOR BASIN: LAKE WINNIPEG EAST WINNIPEG RIVER

STORET CODE: 05
 001

LAT: 49 47 06.67 LONG: 094 30 43.49

U T M: 15 0391150.0 5515625.0 4 REGION: 06

DISTANCE: 92.213

* = INTERIM		TEST-NAME:	RST	TCMF	TCMFBK	TURB	ZNUT
				COLIFORM	COLIFORM		
				TOTAL	TOTAL MF		ZINC
SAMPLE		RESIDUE		MF	BCKGRD		UNF.TOT.
DATE	HR	SAMPLE	TOTAL	CNT	CNT	TURB'ITY	MG/L
YYMMDD	LMT	NUMBER	MG/L	/100ML	/100ML	FTU	AS ZN
830104	1130	11201	130.00	1200	37000	2.50	0.0010
830208	1515	11203	150.00	210000	1500000	2.50	0.0010
830307	1515	11205	110.00	170000	260000	2.60	0.0020
830411	1330	11207	120.00	50000AID	450000	3.20	0.0020
830509	0930	11209	120.00	5000AID	250000	3.00	0.002
830608	0930	11211	110.00	3000AID	130000	0.30	0.0030
830704	1400	11213	110.00	8000AID	91000	2.90	0.0030
830810	1030	11215	220.00	50000AID	390000	1.90	0.0040
830912	1430	11217	160.00	1000AID	61000	2.70	0.0010
831011	1130	11219	200.00	7000AID	70000	2.60	0.0030
831114	1100	11221	110.00	15000	26000	2.10	0.0050
831205	1100	11223	120.00	15000	250000	2.20	0.0020
MAXIMUM			220.00	210000	1500000	3.20	0.0050
ARITH MEAN			138.33	44600	292917	2.37	0.002
GEOM MEAN			134.40	12849	156009	2.12	0.002
MINIMUM			110.00	1000	26000	0.30	0.0010
STD DEV (GEOM *)			37.38	6*	3*	0.75	0.001
# SAMP IN STATISTICS			12	12	12	12	12
% SAMP (EXCLUDED)							

1983 WATER QUALITY DATA REGION 6

141

B.O.W./ SITE: RAINY RIVER
 SAMPLE POINT: DOWNSTREAM OF EMO
 STATION TYPE: RIVER

STATION ID: 19-0001-003-02

MAJOR BASIN: ARCTIC DRAINAGE NELSON RIVER
 MINOR BASIN: LAKE WINNIPEG EAST RAINY RIVER

STORET CODE: 05
 001

LAT: 48 37 31.47				LONG: 093 54 51.43				U T M: 15 0432625.0 5386000.0 4				REGION: 06		DISTANCE: 302.813	
*=INTERIM		TEST-NAME:	FWSADP	FGPROJ	ACDT	ALKT	ASUT	BOD5	CDUT	CLIDUR	COLAP	COND25			
SAMPLE					ACIDITY	ALK	ARSENIC	BOD	CADMIUM	CHLGRIDE					
DATE	HOUR		SAMPLE	PROJECT	TOTAL	TOTAL	UNF.TOT.	5 DAY	UNF.TOT.	UNF.REAC		CONDUCT.			
YYMMDD	LMT	SAMPLE	DEPTH	SUB-PROJ	MG/L	MG/L	MG/L	TOT.DEM.	MG/L	MG/L	COLOUR	25C			
		NUMBER	M	CODE	AS CAC03	AS CAC03	AS AS	MG/L	AS CD	AS CL-	APPARENT	UMHO/CM			
								AS O			HZU	AT 25 C			
830207	1630	11303	0.30	0101		21.0		1.60		4.100	52.000	71.0			
830505	1120	11306	0.30	0101	2.000	25.0	0.0010<	1.20	0.0007	3.700	80.000	84.0			
830608	1330	11315	0.30	0101	3.000	33.0		0.90		5.600	98.000	98.0			
830706	1025	11321	0.30	0101	5.000	31.0		0.50		1.500	86.000	75.0			
830811	0920	11327	0.30	0101	4.000	24.0		0.40		3.300	60.000	73.0			
830914	1400	11333	0.30	0101	3.000	32.0		0.90		3.400	119.000	88.0			
831006	0945	11339	0.30	0101	4.000	40.0		1.40		3.500	130.000	108.0			
831102	0905	11346	0.30	0101	4.000	24.0		0.80		2.800	73.000	70.0			
MAXIMUM			0.30		5.000	40.0		1.60	0.0007	5.600	130.000	108.0			
ARITH MEAN			0.30		3.571	28.7		0.96	0.0007	3.487	87.250	83.4			
GEOM MEAN					3.445	28.2		0.88		3.298	83.555	82.4			
MINIMUM			0.30		2.000	21.0		0.40	0.0007	1.500	52.000	70.0			
STD DEV (GEOM *)					0.976	6.3		0.42		1.156	27.238	13.9			
# SAMP IN STATISTICS			8		7	8		8	1	8	8	8			
% SAMP (EXCLUDED)															
*=INTERIM		TEST-NAME:	COUT	CRUT	CUUT	DO	FCMF	FEUT	FVPH	FWSTRC	FWTEMP	HARDT			
SAMPLE			COBALT	CHROMIUM	COPPER	DISOLVED	COLIFORM	IRON				HARDNESS			
DATE	HOUR		UNF.TOT.	UNF.TOT.	UNF.TOT.	OXYGEN	HF	UNF.TOT.			WATER	TOTAL			
YYMMDD	LMT	SAMPLE	MG/L	MG/L	MG/L	MG/L	CNT	MG/L	PH	STREAM	TEMP	MG/L			
		NUMBER	AS CO	AS CR	AS CU	AS O	/100ML	AS FE	FIELD	COND.	DEG.C	AS CAC03			
830207	1630	11303				11.7	15000>		7.1	4	0.5	24.000			
830505	1120	11306	0.0020<	0.0020	0.0010	11.0	100<	0.3600	7.3	8	5.0	32.000			
830608	1330	11315				9.4	90AID		7.4	8	14.5	39.000			
830706	1025	11321				8.3	200AID		7.4		18.5	33.000			
830811	0920	11327				6.9	10<		7.0	8	21.5	28.000			
830914	1400	11333				7.0	40AID		7.2	8	18.0	38.000			
831006	0945	11339				7.3	90AID		7.4	8	10.0	52.000			
831102	0905	11346				11.0	40AID		7.0	8	8.0	28.000			
MAXIMUM				0.0020	0.0010	11.7	200	0.3600	7.4		21.5	52.000			
ARITH MEAN				0.0020	0.0010	9.1	92	0.3600	7.2		12.0	34.250			
GEOM MEAN						8.9			7.2		8.2	33.353			
MINIMUM				0.0020	0.0010	6.9	40	0.3600	7.0		0.5	24.000			
STD DEV (GEOM *)						2.0			0.2		7.3	8.795			
# SAMP IN STATISTICS				1	1	8	5	1	8		8	8			
% SAMP (EXCLUDED)							37								

(CONT'D)

1983 WATER QUALITY DATA REGION 6

142

B.O.W./ SITE: RAINY RIVER
 SAMPLE POINT: DOWNSTREAM OF EMO
 STATION TYPE: RIVER

STATION ID: 19-0001-003-02

MAJOR BASIN: ARCTIC DRAINAGE NELSON RIVER
 MINOR BASIN: LAKE WINNIPEG EAST RAINY RIVER

STORET CODE: 05
 001

LAT: 48 37 31.47 LONG: 093 54 51.43

U T M: 15 0432625.0 5386000.0 4

REGION: 06

DISTANCE: 302.813

*=-INTERIM TEST-NAME:		HGUT	MNUT	NIUT	PBUT	PH	PP04FR	PPUT	RSP	RST	TCMF
		MERCURY	MANGANSE	NICKEL	LEAD		PO4	PHOSPHOR			COLIFORM
SAMPLE		UNF.TOT.	UNF.TOT.	UNF.TOT.	UNF.TOT.		FIL.REAC	UNF.TOT.	RESIDUE	RESIDUE	TOTAL
DATE	HOUR	UG/L	MG/L	MG/L	MG/L		MG/L	MG/L	PARTIC.	TOTAL	MF
YYMMDD	LMT	AS HG	AS MN	AS NI	AS PB	PH	AS P	AS P	MG/L	MG/L	CNT
											/100ML
830207	1630	11303				6.70	0.002	0.024	3.00	60.00	15000>
830505	1120	11306	0.050<	0.015	0.003	7.30	0.004	0.031	5.00	85.00	100AID
830608	1330	11315				7.10	0.008	0.036	7.00	110.00	810C
830706	1025	11321				7.20	0.009	0.034	8.00	85.00	50000
830811	0920	11327				7.10	0.008	0.026	4.00	100.00	900AID
830914	1400	11333				7.10	0.010	0.042	9.00	160.00	800AID
831006	0945	11339				7.20	0.014	0.046	10.00	140.00	1200
831102	0905	11346				6.90	0.005	0.028	6.00	80.00	380
	MAXIMUM		0.015	0.003		7.30	0.014	0.046	10.00	160.00	50000
	ARITH MEAN		0.015	0.003		7.07	0.007	0.033	6.50	102.50	7741
	GEOM MEAN					7.07	0.007	0.033	6.06	98.05	
	MINIMUM		0.015	0.003		6.70	0.002	0.024	3.00	60.00	100
	STD DEV (GEOM *)					0.19	0.004	0.008	2.45	33.17	
	# SAMP IN STATISTICS		1	1		8	8	8	8	8	7
	% SAMP (EXCLUDED)										12

*=-INTERIM TEST-NAME:		TCMFBK	TURB	ZNUT
		COLIFORM		ZINC
		TOTAL MF		UNF.TOT.
SAMPLE		BCKGRD		MG/L
DATE	HOUR	CNT	TURB'ITY	AS ZN
YYMMDD	LMT	/100ML	FTU	
830207	1630	11303	100000>	1.50
830505	1120	11306	2600	2.90
830608	1330	11315	1800	3.40
830706	1025	11321	200000	3.70
830811	0920	11327	1400	2.00
830914	1400	11333	11100	4.60
831006	0945	11339	10300	5.60
831102	0905	11346	1600	3.10
	MAXIMUM	200000	5.60	0.0010
	ARITH MEAN	32686	3.35	0.0010
	GEOM MEAN		3.11	
	MINIMUM	1400	1.50	0.0010
	STD DEV (GEOM *)		1.32	
	# SAMP IN STATISTICS	7	8	1
	% SAMP (EXCLUDED)	12		

1983 WATER QUALITY DATA REGION 6

143

B.O.W./ SITE: RAINY RIVER
 SAMPLE POINT: UPSTREAM FROM FORT FRANCES TOLL BRIDGE
 STATION TYPE: RIVER FLOW GAUGE FED 05PC019

STATION ID: 19-0001-004-02

MAJOR BASIN: ARCTIC DRAINAGE NELSON RIVER
 MINOR BASIN: LAKE WINNIPEG EAST RAINY RIVER

STORET CODE: 05
 001

LAT: 48 36 19.61 LONG: 093 23 12.96

U T M: 15 0471475.0 5383450.0 4

REGION: 06

DISTANCE: 341.506

*INTERIM TEST-NAME:		FWSADP	FGPROJ	ACDT	ALKT	ALUT	ASUT	BOD5	CCNAUR	CCNFUR	CDUT
				ACIDITY	ALK	ALUMINUM	ARSENIC	BOD	CYANIDE	CYANIDE	CADMIUM
				TOTAL	TOTAL	UNF.TOT.	UNF.TOT.	5 DAY	AVAIL	FREE	TOT.
SAMPLE	DATE	TIME	SAMPLE	PROJECT	MG/L	MG/L	MG/L	TOT.DEM.	UNF.REAC	UNF.REAC	UNF.TOT.
YYMMDD	LMT	NUMBER	DEPTH	SUB-PROJ	AS CACO3	AS CACO3	AS AL	MG/L	MG/L	MG/L	MG/L
			M	CODE				AS O	AS HCN	AS HCN	AS CD
830209	1200	11300	0.30	0101		18.0	0.050	0.0010<	0.50	0.001<W	0.0005<
830505	0830	11309	0.30	0101	2.000	16.0		0.0010<	0.80	0.001<W	0.0005<
830608	1530	11312	0.30	0101	3.000	19.0			1.00		
830706	0840	11318	0.30	0101	4.000	20.0		0.0010<	0.50		0.0015
830811	1315	11324	0.30	0101	3.000	19.0			1.00		
830914	1140	11330	0.30	0101	2.000	20.0		0.0010<	0.70	0.001<W	0.0005<
831006	1250	11336	0.30	0101	3.000	20.0			1.10		
831102	1540	11343	0.30	0101	4.000	20.0		0.0010	0.50	0.001	0.0005<
MAXIMUM			0.30		4.000	20.0	0.050	0.0010	1.10	0.001	0.0015
ARITH MEAN			0.30		3.000	19.0	0.050	0.0010	0.76	0.001<A	0.0015
GEOM MEAN					2.901	19.0			0.73	0.001<A	
MINIMUM			0.30		2.000	16.0	0.050	0.0010	0.50	0.001	0.0015
STD DEV (GEOM *)					0.816	1.4			0.25	0.000<A	
# SAMP IN STATISTICS			8		7	8	1	1	8	4	1
% SAMP (EXCLUDED)								80			80

*INTERIM TEST-NAME:		CLIDUR	COLAP	COND25	COUT	CRUT	CUUT	DO	FCMF	FEUT	FWFLOW	
		CHLORIDE	COLOUR	CONDUCT.	COBALT	CHROMIUM	COPPER	DISOLVED	FECAL	IRON	STREAM	
		UNF.REAC	APPARENT	25C	UNF.TOT.	UNF.TOT.	UNF.TOT.	OXYGEN	COLIFORM	UNF.TOT.	FLOW	
SAMPLE	DATE	TIME	AS CL-	UMHO/CM	MG/L	MG/L	MG/L	MG/L	MF	MG/L	M3	
YYMMDD	LMT	NUMBER	AS CL-	AT 25 C	AS CO	AS CR	AS CU	AS O	CNT	AS FE	/S	
									/100ML			
830209	1200	11300	0.800	47.000	52.0	0.0020<	0.0020<	0.0020	12.7	4<	0.1100	286.000
830505	0830	11309	0.100<	44.000	47.0	0.0020<	0.0020<	0.0010	13.3	4	0.1400	162.000
830608	1530	11312	0.700	52.000	49.0				16.7	4<		106.000
830706	0840	11318	0.700	51.000	52.0	0.0020<	0.0020<	0.0020	8.4	8	0.2400	552.000
830811	1315	11324	0.800	48.000	55.0				8.2			242.000
830914	1140	11330	0.700	40.000	56.0	0.0020<	0.0020	0.0020	8.3	4	0.0970	236.000
831006	1250	11336	0.800	42.000	56.0				9.6	10<		212.000
831102	1540	11343	0.800	47.000	54.0	0.0020<	0.0020<	0.0020	12.4	10AID	0.1300	379.000
MAXIMUM			0.800	52.000	56.0		0.0020	0.0020	16.7	10	0.2400	552.000
ARITH MEAN			0.757	46.375	52.6		0.0020	0.0018	11.2	6	0.1434	271.875
GEOM MEAN				46.208	52.5			0.0017	10.8		0.1360	243.699
MINIMUM			0.700	40.000	47.0		0.0020	0.0010	8.2	4	0.0970	106.000
STD DEV (GEOM *)				4.173	3.3			0.0004	3.1		0.0565	139.128
# SAMP IN STATISTICS			7	8	8		1	5	8	4	5	8
% SAMP (EXCLUDED)			12				80			42		

(C O N T D)

1983 WATER QUALITY DATA REGION 6

144

B.O.W./ SITE: RAINY RIVER
 SAMPLE POINT: UPSTREAM FROM FORT FRANCES TOLL BRIDGE
 STATION TYPE: RIVER FLOW GAUGE FED 05PC019

STATION ID: 19-0001-004-02

MAJOR BASIN: ARCTIC DRAINAGE NELSON RIVER
 MINOR BASIN: LAKE WINNIPEG EAST RAINY RIVER

STORET CODE: 05
 001

LAT: 48 36 19.61 LONG: 093 23 12.96

U T M: 15 0471475.0 5383450.0 4

REGION: 06

DISTANCE: 341.506

*INTERIM TEST-NAME:			FWPH	FWSTRC	FWTEMP	HARDT	HGUT	MNUT	NIUT	PBUT	PH	PP04FR
						HARDNESS	MERCURY	MANGANESE	NICKEL	LEAD		P04
SAMPLE						TOTAL	UNF.TOT.	UNF.TOT.	UNF.TOT.	UNF.TOT.		FIL.REAC
DATE	HOUR	SAMPLE	PH	STREAM	TEMP	MG/L	UG/L	MG/L	MG/L	MG/L		MG/L
YYMMDD	LMT	NUMBER	FIELD	COND.	DEG.C	AS CAC03	AS HG	AS MN	AS NI	AS PB	PH	AS P
830209	1200	11300	7.1	4	0.5	22.000	0.050<	0.007	0.002<	0.003<	7.00	0.005
830505	0830	11309	7.3	8	3.0	20.000	0.050<	0.006	0.004	0.003<	7.10	0.001
830608	1530	11312	7.2		12.0	20.000					7.00	0.001
830706	0840	11318	7.3	8	18.0	22.000		0.009	0.002	0.006	7.10	0.003
830811	1315	11324	7.0	8	23.0	22.000	0.050<				7.10	0.003
830914	1140	11330	7.5	8	19.0	24.000	0.050<	0.007	0.002<	0.003<	7.20	0.003
831006	1250	11336	7.2	8	11.0	24.000					7.10	0.003
831102	1540	11343	7.1	8	7.5	21.000	0.050<	0.009	0.002<	0.003<	7.00	0.003
MAXIMUM			7.5		23.0	24.000		0.009	0.004	0.006	7.20	0.005
ARITH MEAN			7.2		11.7	21.875		0.008	0.003	0.006	7.07	0.003
GEOM MEAN			7.2		7.6	21.827		0.008			7.07	0.002
MINIMUM			7.0		0.5	20.000		0.006	0.002	0.006	7.00	0.001
STD DEV (GEOM *)			0.2		7.9	1.553		0.001			0.07	0.001
# SAMP IN STATISTICS			8		8	8		5	2	1	8	8
% SAMP (EXCLUDED)									60	80		
*INTERIM TEST-NAME:			PPUT	RSP	RST	TCMF	TCMFBK	TURB	ZNUT			
						COLIFORM	COLIFORM					
SAMPLE			PHOSPHOR	RESIDUE	RESIDUE	TOTAL	TOTAL MF		ZINC			
DATE	HOUR	SAMPLE	UNF.TOT.	PARTIC.	TOTAL	MF	BCKGRD		UNF.TOT.			
YYMMDD	LMT	NUMBER	MG/L	MG/L	MG/L	CNT	CNT	TURB'ITY	MG/L			
			AS P			/100ML	/100ML	FTU	AS ZN			
830209	1200	11300	0.012	1.00	55.00	10<	40AID	0.60	0.0010			
830505	0830	11309	0.016	3.00	60.00	10AID	70AID	1.00	0.0010			
830608	1530	11312	0.015	4.00	90.00	90C	4500	1.60				
830706	0840	11318	0.014	5.00	65.00	300AID	7100	2.10	0.0020			
830811	1315	11324	0.016	3.00	120.00	3500	16000	1.30				
830914	1140	11330	0.017	3.00	90.00	130C	7100	1.50	0.0010<			
831006	1250	11336	0.019	3.00	70.00	120	1700	1.30				
831102	1540	11343	0.016	2.00	50.00	10AID	560	1.50	0.0010<			
MAXIMUM			0.019	5.00	120.00	3500	16000	2.10	0.0020			
ARITH MEAN			0.016	3.00	75.00	594	4634	1.36	0.0013			
GEOM MEAN			0.016	2.75	72.09		1328	1.29				
MINIMUM			0.012	1.00	50.00	10	40	0.60	0.0010			
STD DEV (GEOM *)			0.002	1.20	23.45		9*	0.44				
# SAMP IN STATISTICS			8	8	8	7	8	8	3			
% SAMP (EXCLUDED)						12			40			

1983 WATER QUALITY DATA REGION 6

145

B.O.W./ SITE: WABIGOON RIVER
 SAMPLE POINT: UPSTR FROM GREAT LAKES FOREST PRODUCTS
 STATION TYPE: RIVER

STATION ID: 19-0001-005-02

MAJOR BASIN: ARCTIC DRAINAGE NELSON RIVER
 MINOR BASIN: LAKE WINNIPEG EAST WINNIPEG RIVER
 TERM STREAM: ENGLISH RIVER

STORET CODE: 05
 001
 1890

LAT: 49 46 20.06 LONG: 092 50 47.56

U T M: 15 0511050.0 5513100.0 4

REGION: 06

DISTANCE: 265.017

*INTERIM TEST-NAME:			FWSADP	FGPROJ	ALKT	ASUT	BOD5	CLIDUR	COLAP	COND25	CUUT	DO
					ALK	ARSENIC	BOD	CHLORIDE				
SAMPLE			SAMPLE	PROJECT	TOTAL	UNF. TOT.	5 DAY	UNF. REAC	COLOUR	CONDUCT.	COPPER	DISSOLVED
DATE	HR		DEPTH	SUB-PROJ	MG/L	MG/L	TOT. DEM.	MG/L	APPARENT	25C	UNF. TOT.	OXYGEN
YYMMDD	LMT	SAMPLE	M	CODE	AS CAC03	AS AS	AS O	AS CL-	HZU	UMHO/CM	MG/L	MG/L
		NUMBER								AT 25 C	AS CU	AS O
830105	1245	11075	0.30	0101	51.0	0.0010<	0.60	1.300	64.000	112.0	0.0030	9.2
830208	0930	11079	0.30	0101	52.0	0.0010<	0.60	1.500	78.000	115.0	0.0040	12.0
830309	1250	11083	0.30	0101	52.0	0.0010	0.20	1.400	64.000	112.0	0.0060	12.0
830407	1045	11087	0.30	0101	51.0	0.0010<	0.90	1.500	64.000	112.0	0.0050	10.2
830502	1550	11091	0.30	0101	44.0	0.0010<	0.80	1.700	61.000	101.0	0.0020	12.2
830606	1620	11095	0.30	0101	46.0	0.0010<	0.90	1.800	70.000	104.0	0.0040	9.8
830704	1535	11000	0.30	0101	49.0	0.0010<	0.60	1.500	66.000	103.0	0.0030	8.2
830808	1555	11004	0.30	0101	46.0	0.0010<	1.00	1.300	88.000	103.0	0.0030	7.0
830912	1550	11008	0.30	0101	49.0	0.0010<	1.20	1.300	59.000	103.0	0.0040	7.8
831003	1610	11012	0.30	0101	48.0	0.0010<	1.00	1.400	48.000	108.0	0.0030	10.4
831101	1515	11016	0.30	0101	50.0	0.0010<	0.70	1.300	49.000	108.0	0.0020	10.6
MAXIMUM			0.30		52.0	0.0010	1.20	1.800	88.000	115.0	0.0060	12.2
ARITH MEAN			0.30		48.9	0.0010	0.77	1.455	64.636	107.4	0.0035	9.9
GEOM MEAN					48.8		0.71	1.446	63.725	107.3	0.0034	9.8
MINIMUM			0.30		44.0	0.0010	0.20	1.300	48.000	101.0	0.0020	7.0
STD DEV (GEOM *)					2.7		0.27	0.169	11.500	4.8	0.0012	1.8
# SAMP IN STATISTICS			11		11	1	11	11	11	11	11	11
% SAMP (EXCLUDED)						90						

*INTERIM TEST-NAME:		FCMF	FEUT	FWPH	FWSTRC	FWTEMP	HARDT	HGUT	MNUT	NIUT	NNHTFR
		FECAL COLIFORM	IRON								NH3-N
SAMPLE DATE	HR	MF CNT	UNF. TOT. MG/L	PH	STREAM COND.	WATER TEMP DEG. C	HARDNESS TOTAL MG/L	MERCURY UNF. TOT. UG/L	MANGANSE UNF. TOT. MG/L	NICKEL UNF. TOT. MG/L	FIL. REAC MG/L
YYMMDD	LMT	/100ML	AS FE	FIELD			AS CAC03	AS HG	AS MN	AS NI	AS N
830105	1245	11075	4<	0.8400		4	0.5	52.000	0.005<	0.010	0.010<
830208	0930	11079	4<	0.7000	7.3	4	2.0	51.000	0.005<	0.010	0.010<
830309	1250	11083	2<	0.7500	7.3	4	1.5	54.000	0.005<	0.014	0.020
830407	1045	11087	4<	0.6100	7.2	4	5.0	51.000	0.005<	0.012	0.010<
830502	1550	11091	24	1.2000	7.3		3.5	45.000	0.006	0.025	0.010<
830606	1620	11095	12	1.1000	7.6	8	13.0	50.000	0.005<	0.022	0.010
830704	1535	11000	12	1.1000	7.6		18.5	49.000	0.008	0.019	0.020
830808	1555	11004	24	0.9000	7.2	8	23.5	49.000	0.004	0.021	0.010<
830912	1550	11008	8	0.8100		8	18.0	51.000	0.004	0.018	0.010
831003	1610	11012	24<	0.5600	8.2	8	11.0	52.000	0.004	0.018	0.010<
831101	1515	11016	10<	0.5800	7.2	8	8.0	49.000	0.005<	0.013	0.010<

(C O N T D)

1983 WATER QUALITY DATA REGION 6

146

B.O.W./ SITE: WABIGOOON RIVER
 SAMPLE POINT: UPSTR FROM GREAT LAKES FOREST PRODUCTS
 STATION TYPE: RIVER

STATION ID: 19-0001-005-02

MAJOR BASIN: ARCTIC DRAINAGE NELSON RIVER
 MINOR BASIN: LAKE WINNIPEG EAST WINNIPEG RIVER
 TERM STREAM: ENGLISH RIVER

STORET CODE: 05
 001
 1890

LAT: 49 46 20.06 LONG: 092 50 47.56

U T M: 15 0511050.0 5513100.0 4

REGION: 06

DISTANCE: 265.017

*=INTERIM TEST-NAME:			FCMF FECAL COLIFORM	FEUT IRON UNF.TOT. MG/L AS FE	FVPH PH FIELD	FWSTRC STREAM COND.	FWTEMP WATER TEMP DEG.C	HARDT HARDNESS TOTAL MG/L AS CAC03	HGUT MERCURY UNF.TOT. UG/L AS HG	MNUT MANGANSE UNF.TOT. MG/L AS MN	NIUT NICKEL UNF.TOT. MG/L AS NI	NNHTFR NH3-N TOTAL FIL.REAC MG/L AS N
SAMPLE DATE YYMMDD	HOUR LMT	SAMPLE NUMBER	MF CNT /100ML									
		MAXIMUM	24	1.2000	8.2		23.5	54.000	0.008	0.025	0.004	0.020
		ARITH MEAN	17	0.8318	7.4		9.5	50.273	0.005	0.017	0.003	0.015
		GEOM MEAN		0.8054	7.4		5.8	50.222		0.016		
		MINIMUM	8	0.5600	7.2		0.5	45.000	0.004	0.010	0.002	0.010
		STD DEV (GEOM *)		0.2225	0.3		7.9	2.328		0.005		
		# SAMP IN STATISTICS	6	11	9		11	11	5	11	7	4
		% SAMP (EXCLUDED)	45						54		36	63

*=INTERIM TEST-NAME:			NN02FR	NN03FR	NNTKUR K'DAHL N TOTAL	PH	PP04FR	PPUT	RSP	RST	SS04UR	TCMF COLIFORM TOTAL MF CNT /100ML
SAMPLE DATE YYMMDD	HOUR LMT	SAMPLE NUMBER	N02-N FIL.REAC MG/L AS N	N03-N FIL.REAC MG/L AS N	UNF.REAC MG/L AS N	PH	P04 FIL.REAC MG/L AS P	PHOSPHOR UNF.TOT. MG/L AS P	RESIDUE PARTIC. MG/L	RESIDUE TOTAL MG/L	SULPHATE UNF.REAC MG/L AS S04	
830105	1245	11075	0.005	0.030	0.390	7.80	0.012	0.023	1.00	120.00	2.300	10<
830208	0930	11079	0.005	0.040	0.490	7.50	0.012	0.028	2.00	110.00	1.900	10AID
830309	1250	11083	0.005	0.040	0.540	7.60	0.010	0.023	1.00	110.00	1.900	90AID
830407	1045	11087	0.004	0.050	0.420	7.20	0.010	0.025	1.00	90.00	3.600	10AID
830502	1550	11091	0.004	0.010	0.450	7.40	0.008	0.036	30.00	110.00	3.400	200
830606	1620	11095	0.005	0.010<	0.510	7.60	0.009	0.024	10.00	110.00	3.800	110C
830704	1535	11000	0.006	0.010	0.470	7.50	0.013	0.031	6.00	95.00	4.200	400AID
830808	1555	11004	0.005	0.010<	0.480	7.70	0.012	0.034	9.00	130.00	3.900	200C
830912	1550	11008	0.004	0.010<	0.530	7.80	0.012	0.042	10.00	95.00	3.000	600AID
831003	1610	11012	0.003	0.010	0.470	8.00	0.009	0.032	7.00	130.00	3.100	110
831101	1515	11016	0.003	0.010<	0.420	7.40	0.009	0.027	4.00	85.00	3.100	10<
		MAXIMUM	0.006	0.050	0.540	8.00	0.013	0.042	30.00	130.00	4.200	600
		ARITH MEAN	0.004	0.027	0.470	7.59	0.011	0.030	7.36	107.73	3.109	192
		GEOM MEAN	0.004		0.468	7.59	0.010	0.029	4.29	106.74	3.008	
		MINIMUM	0.003	0.010	0.390	7.20	0.008	0.023	1.00	85.00	1.900	10
		STD DEV (GEOM *)	0.001		0.047	0.23	0.002	0.006	8.32	15.23	0.788	
		# SAMP IN STATISTICS	11	7	11	11	11	11	11	11	11	9
		% SAMP (EXCLUDED)		36								18

(CONT D)

1983 WATER QUALITY DATA REGION 6

147

B.O.W./ SITE: WABIGOON RIVER
 SAMPLE POINT: UPSTR FROM GREAT LAKES FOREST PRODUCTS
 STATION TYPE: RIVER

STATION ID: 19-0001-005-02

MAJOR BASIN: ARCTIC DRAINAGE NELSON RIVER
 MINOR BASIN: LAKE WINNIPEG EAST WINNIPEG RIVER
 TERM STREAM: ENGLISH RIVER

STORET CODE: 05
 001
 1890

LAT: 49 46 20.06 LONG: 092 50 47.56

U T M: 15 0511050.0 5513100.0 4

REGION: 06

DISTANCE: 265.017

*INTERIM TEST-NAME:		TCMFBK	TURB	ZNUT	
		COLIFORM		ZINC	
		TOTAL MF		UNF.TOT.	
SAMPLE		BCKGRD			
DATE	HR	CNT	TURB'ITY	MG/L	
YYMMDD	LMT	NUMBER	FTU	AS ZN	
830105	1245	11075	40AID	12.00	0.0020
830208	0930	11079	40AID	9.30	0.0030
830309	1250	11083	390	8.40	0.0030
830407	1045	11087	40AID	8.40	0.0040
830502	1550	11091	510	9.80	0.0030
830606	1620	11095	5000	14.00	0.0030
830704	1535	11000	3500	17.00	0.0030
830808	1555	11004	50000	14.00	0.0030
830912	1550	11008	4800	18.00	0.0030
831003	1610	11012	880	12.00	0.0010
831101	1515	11016	2900	12.00	0.0040
MAXIMUM		50000	18.00	0.0040	
ARITH MEAN		6191	12.26	0.0029	
GEOM MEAN		834	11.88	0.0028	
MINIMUM		40	8.40	0.0010	
STD DEV (GEOM *)		10*	3.26	0.0008	
# SAMP IN STATISTICS		11	11	11	
% SAMP (EXCLUDED)					

148

STATION ID: 19-0001-006-02

STORET CODE: 05
001
1890

DISTANCE: 264.408

*=INTERIM	TEST-NAME:		DO	FCHF	FEUT	FWFLOW	FWPH	FWSTRC	FWTEMP	HARDT	HGUT	MNUT
SAMPLE DATE YYMMDD	HOUR LMT	SAMPLE NUMBER	DISOLVED OXYGEN	FECAL COLIFORM MF CNT /100ML	IRON UNF. TOT. MG/L AS FE	STREAM FLOW M3 /S	PH	STREAM COND.	WATER TEMP DEG.C	HARDNESS TOTAL MG/L AS CaCO3	MERCURY UNF. TOT. UG/L AS HG	MANGANESE UNF. TOT. UG/L AS MN
			AS O									
830105	1230	11076	11.2	100	0.8300	12.600		8	3.0	51.000	0.011	0.013
830208	0900	11080	12.6	550	0.7600	12.500	7.2	8	3.0	62.000	0.009	0.035
830309	1220	11084	10.5	19000	1.3000	10.300	7.0	8	6.0	86.000	0.037	0.160
830407	1030	11088	8.8	2000	0.8700	12.600	7.0	8	9.0	59.000	0.014	0.059
830502	1540	11092	12.1	76000	0.5900	12.200	7.3	9 5	4.0	59.000	0.015	0.055
830606	1605	11096	9.4	7000AID	1.0000	12.600	7.2	3	13.5	60.000	0.030	0.054
830704	1510	11001	7.5	10000C	1.3000	12.500	7.2	0	20.0	60.000	0.027	0.056
830808	1540	11005	6.0	1500000>	1.1000	12.500	7.2	8	23.5	54.000	0.011	0.032
830912	1530	11009	7.2	10000<	0.7900	7.220	7.8		18.5	57.000	0.010	0.038
831003	1600	11013	8.4	200000C	0.9300	2.550	7.0	9	13.0	119.000	0.024	0.210
831101	1500	11017	8.6	100AID	0.6500	2.970	7.0	9	11.5	95.000	0.009	0.120

(C O N T D)

1983 WATER QUALITY DATA REGION 6

149

B.O.W./ SITE: WABIGOOON RIVER
 SAMPLE POINT: AT GOLF COURSE BRIDGE DRYDEN
 STATION TYPE: RIVER FLOW GAUGE FED 05QD016

STATION ID: 19-0001-006-02

MAJOR BASIN: ARCTIC DRAINAGE NELSON RIVER
 MINOR BASIN: LAKE WINNIPEG EAST WINNIPEG RIVER
 TERM STREAM: ENGLISH RIVER

STORET CODE: 05
 001
 1890

LAT: 49 47 21.61 LONG: 092 51 12.37

U T M: 15 0510550.0 5515000.0 4

REGION: 06

DISTANCE: 264.408

*INTERIM TEST-NAME:		DO	FCMF FECAL COLIFORM	FEUT IRON UNF.TOT.	FWFLOW STREAM FLOW	FWPH PH	FWSTRC STREAM COND.	FWTEMP WATER TEMP	HARDT HARDNESS TOTAL	HGUT MERCURY UNF.TOT.	MNUT MANGANESE UNF.TOT.
DATE	TIME	MG/L	CNT	MG/L	M3	FIELD	COND.	DEG.C	AS CAC03	AS HG	AS MN
YYMMDD	LMT	AS O	/100ML	AS FE	/S						
		MAXIMUM	12.6	200000	1.3000	12.600	7.8	23.5	119.000	0.037	0.210
		ARITH MEAN	9.3	34972	0.9200	10.049	7.2	11.4	69.273	0.018	0.076
		GEOM MEAN	9.1		0.8929	8.873	7.2	9.1	66.820	0.016	0.057
		MINIMUM	6.0	100	0.5900	2.550	7.0	3.0	51.000	0.009	0.013
		STD DEV (GEOM *)	2.1		0.2372	3.957	0.2	7.1	21.373	0.010	0.061
		# SAMP IN STATISTICS	11	9	11	11	10	11	11	11	11
		% SAMP (EXCLUDED)		18							

*INTERIM TEST-NAME:		NIUT	NNHTFR NH3-N TOTAL	NNO2FR NO2-N FIL.REAC	NNO3FR NO3-N FIL.REAC	NNTKUR K'DAHL N TOTAL	PH	PP04FR P04 FIL.REAC	PPUT PHOSPHOR UNF.TOT.	RSP RESIDUE PARTIC.	RST RESIDUE TOTAL
DATE	TIME	MG/L	MG/L	MG/L	MG/L	MG/L	PH	AS P	AS P	MG/L	MG/L
YYMMDD	LMT	AS NI	AS N	AS N	AS N	AS N					
830105	1230	11076	0.002<	0.010<	0.005	0.010<	0.440	7.60	0.008	0.026	5.00
830208	0900	11080	0.002	0.010<	0.006	0.010<	0.460	7.40	0.014	0.045	4.00
830309	1220	11084	0.005	0.020	0.019	0.610	7.00	0.065	0.140	5.00	
830407	1030	11088	0.002	0.010<	0.009	0.010<	0.500	7.00	0.008	0.054	5.00
830502	1540	11092	0.002	0.010<	0.014	0.010<	0.500	7.20	0.028	0.066	5.00
830606	1605	11096	0.002<	0.010	0.012	0.010	0.620	6.90	0.012	0.066	7.00
830704	1510	11001	0.002<	0.010	0.011	0.010	0.530	7.00	0.013	0.061	10.00
830808	1540	11005	0.007	0.010	0.007	0.010<	0.510	7.60	0.012	0.046	10.00
830912	1530	11009	0.002<	0.010	0.006	0.010<	0.570	7.50	0.014	0.054	10.00
831003	1600	11013	0.005	0.040	0.024	0.010<	0.130	7.10	0.022	0.900	8.00
831101	1500	11017	0.002<	0.020	0.018	0.010<	0.860	7.00	0.029	0.110	6.00
		MAXIMUM	0.007	0.040	0.024	0.010	0.860	7.60	0.065	0.900	10.00
		ARITH MEAN	0.004	0.017	0.012	0.010	0.521	7.21	0.020	0.143	6.82
		GEOM MEAN			0.011	0.010	0.482	7.20	0.017	0.077	6.48
		MINIMUM	0.002	0.010	0.005	0.010	0.130	6.90	0.008	0.026	4.00
		STD DEV (GEOM *)			0.006	0.010	0.173	0.27	0.016	0.253	2.32
		# SAMP IN STATISTICS	6	7	11	2	11	11	11	11	11
		% SAMP (EXCLUDED)	45	36		80					

(CONTD)

1983 WATER QUALITY DATA REGION 6

150

B.O.W./ SITE: WABIGOOON RIVER
 SAMPLE POINT: AT GOLF COURSE BRIDGE DRYDEN
 STATION TYPE: RIVER FLOW GAUGE FED 05QD016

STATION ID: 19-0001-006-02

MAJOR BASIN: ARCTIC DRAINAGE NELSON RIVER
 MINOR BASIN: LAKE WINNIPEG EAST WINNIPEG RIVER
 TERM STREAM: ENGLISH RIVER

STORET CODE: 05
 001
 1890

LAT: 49 47 21.61 LONG: 092 51 12.37

U T M: 15 0510550.0 5515000.0 4 REGION: 06

DISTANCE: 264.408

*INTERIM TEST-NAME:		SS04UR	TCHF	TCHFBK	TURB	ZNUT	
		SULPHATE	COLIFORM	COLIFORM		ZINC	
		UNF.REAC	TOTAL	TOTAL MF		UNF.TOT.	
SAMPLE	DATE	MG/L	MF	BCKGRD		MG/L	
DATE	TIME	AS SO4	CNT	CNT	TURB'ITY	AS ZN	
YYMMDD	LMT	NUMBER	/100ML	/100ML	FTU		
830105	1230	11076	4.700	300AID	400AID	14.00	0.0020
830208	0900	11080	5.000	700000AID	2400000	12.50	0.0060
830309	1220	11084	47.000	4700000	116E+05	17.00	0.0300
830407	1030	11088	9.200	450000	700000	14.00	0.0110
830502	1540	11092	13.000	700000AID	200E+05	13.00	0.0090
830606	1605	11096	8.900	730000	60000AID	15.00	0.0070
830704	1510	11001	11.000	530000	820000	18.00	0.0130
830808	1540	11005	15.000	150E+05>	100E+06>	16.00	0.0080
830912	1530	11009	4.800	20000AID	210000	18.00	0.0050
831003	1600	11013	28.000	3300000	2500000	6.20	0.0190
831101	1500	11017	18.000	56000	169000	8.10	0.0080
MAXIMUM		47.000	4700000	200E+05	18.00	0.0300	
ARITH MEAN		14.964	1118630	3845940	13.80	0.0107	
GEOM MEAN		11.509			13.20	0.0086	
MINIMUM		4.700	300	400	6.20	0.0020	
STD DEV (GEOM *)		12.661			3.80	0.0078	
# SAMP IN STATISTICS		11	10	10	11	11	
% SAMP (EXCLUDED)			9	9			

1983 WATER QUALITY DATA REGION 6

151

B.O.W./ SITE: TROUTLAKE RIVER
 SAMPLE POINT: AT HIGHWAY NO 105
 STATION TYPE: RIVER

STATION ID: 19-0001-008-02

MAJOR BASIN: ARCTIC DRAINAGE NELSON RIVER
 MINOR BASIN: LAKE WINNIPEG EAST WINNIPEG RIVER
 TERM STREAM: ENGLISH RIVER

STORET CODE: 05
 001
 1890

LAT: 50 49 24.44 LONG: 093 25 29.18

U T M: 15 0470080.0 5630060.0 4

REGION: 06

DISTANCE: 233.349

*INTERIM TEST-NAME:		FWSADP	FGPROJ	ACDT	ALKT	ALUT	ASUT	BOD5	CCNAUR	CCNFUR	CDUT
				ACIDITY	ALK	ALUMINUM	ARSENIC	BOD	CYANIDE	CYANIDE	CADMIUM
				TOTAL	TOTAL	UNF.TOT.	UNF.TOT.	5 DAY	AVAIL	FREE	
SAMPLE	DATE HOUR	SAMPLE	PROJECT	MG/L	MG/L	MG/L	MG/L	TOT.DEM.	UNF.REAC	UNF.REAC	UNF.TOT.
YYMMDD	LMT	NUMBER	SUB-PROJ	AS CACO3	AS CACO3	AS AL	AS AS	AS O	AS HCN	AS HCN	AS CD
		DEPTH	CODE								
		M									
830124	1530	11100	0101	5.000	88.0		0.0030	2.30	0.001<T	0.001<W	0.0008
830328	1620	11101	0101	5.000	47.0		0.0010	0.70			0.0005<
830504	1045	11103	0101	3.000	38.0		0.0010	1.00	0.001<W	0.001<W	0.0005<
830607	0900	11104	0101	3.000	41.0			0.90			
830704	1630	11105	0101	3.000	44.0			0.90			
830809	1420	11106	0101	4.000	40.0			1.00			
830913	1430	11107	0101	2.000	41.0	0.410	0.0035	0.90			0.0005<
831004	1500	11108	0101	4.000	39.0			0.90			
MAXIMUM		0.30		5.000	88.0	0.410	0.0035	2.30	0.001	0.001	0.0008
ARITH MEAN		0.30		3.625	47.2	0.410	0.0021	1.07	0.001<A	0.001<A	0.0008
GEOM MEAN				3.482	45.4		0.0018	1.01	0.001<A	0.001<A	
MINIMUM		0.30		2.000	38.0	0.410	0.0010	0.70	0.001	0.001	0.0008
STD DEV (GEOM *)				1.061	16.7		0.0013	0.50	0.000<A	0.000<A	
# SAMP IN STATISTICS		8		8	8	1	4	8	2	2	1
% SAMP (EXCLUDED)											75

*INTERIM TEST-NAME:		CLIDUR	COLAP	COND25	COUT	CRUT	CUUT	DO	FEUT	FWPH	FWSTRC
		CHLORIDE	COLOUR	CONDUCT.	COBALT	CHROMIUM	COPPER	DISOLVED	IRON		
		UNF.REAC	APPARENT	25C	UNF.TOT.	UNF.TOT.	UNF.TOT.	OXYGEN	UNF.TOT.		
SAMPLE	DATE HOUR	MG/L	HZU	UMHO/CM	MG/L	MG/L	MG/L	MG/L	MG/L	PH	STREAM
YYMMDD	LMT	AS CL-		AT 25 C	AS CO	AS CR	AS CU	AS O	AS FE	FIELD	COND.
830124	1530	11100	64.000	206.0	0.0020<		0.0060	13.1	0.2600	7.2	4
830328	1620	11101	30.000	108.0	0.0020		0.0020	11.9	0.1900	7.0	4
830504	1045	11103	27.000	94.0	0.0020<		0.0020	11.9	0.2500	7.3	8
830607	0900	11104	55.000	97.0				11.0	0.5000	7.5	
830704	1630	11105	78.000	101.0				8.5	0.9500	7.1	
830809	1420	11106	57.000	93.0				7.5	0.2000	7.0	8
830913	1430	11107	47.000	92.0	0.0020<	0.0020<	0.0020	9.8	0.4300	7.7	8
831004	1500	11108	40.000	92.0				8.6	0.4000	7.5	8
MAXIMUM		3.300	78.000	206.0	0.0020		0.0060	13.1	0.9500	7.7	
ARITH MEAN		1.043	49.750	110.4	0.0020		0.0030	10.3	0.3975	7.3	
GEOM MEAN			47.005	106.2			0.0026	10.1	0.3452	7.3	
MINIMUM		0.500	27.000	92.0	0.0020		0.0020	7.5	0.1900	7.0	
STD DEV (GEOM *)			17.285	39.0			0.0020	2.0	0.2506	0.3	
# SAMP IN STATISTICS		7	8	8	1	4	8	8	8	8	
% SAMP (EXCLUDED)		12			75						

(CONTD)

1983 WATER QUALITY DATA REGION 6

153

B.O.W./ SITE: RAINY RIVER
 SAMPLE POINT: DNSTR.FROM CONFLUENCE WITH BAUDETTE R.
 STATION TYPE: RIVER

STATION ID: 19-0001-009-02

MAJOR BASIN: ARCTIC DRAINAGE NELSON RIVER
 MINOR BASIN: LAKE WINNIPEG EAST RAINY RIVER

STORET CODE: 05
 001

LAT: 48 43 10.93 LONG: 094 35 28.91

U T M: 15 0382950.0 5397300.0 4

REGION: 06

DISTANCE: 225.946

*INTERIM TEST-NAME:		FWSADP	FGPROJ	ALKT	ALUT	ASUT	BOD5	CCNAUR	CCNFUR	CDUT	CLIDUR	
							BOD 5 DAY	CYANIDE AVAIL	CYANIDE FREE	CADMIUM	CHLORIDE	
SAMPLE DATE YYMMDD	HOUR LMT	SAMPLE NUMBER	SAMPLE DEPTH M	PROJECT SUB-PROJ CODE	ALK TOTAL MG/L AS CAC03	ALUMINUM UNF.TOT. MG/L AS AL	ARSENIC UNF.TOT. MG/L AS AS	TOT.DEM. MG/L AS O	UNF.REAC MG/L AS HCN	UNF.REAC MG/L AS HCN	UNF.TOT. MG/L AS CD	UNF.REAC MG/L AS CL-
830207	1455	11305	0.30	0101	25.0	0.100	0.0010<	1.30	0.001<W	0.001<	0.0009	3.100
830505	1730	11311	0.30	0101	40.0		0.0010<	0.70	0.001<W	0.001<	0.0006	3.300
830608	1220	11317	0.30	0101	42.0			0.90				4.500
830706	1130	11323	0.30	0101	35.0		0.0010<	0.60			0.0015	1.500
830811	1000	11329	0.30	0101	27.0			1.20				2.600
830914	1500	11335	0.30	0101	39.0		0.0010<	0.70	0.001<W	0.001<	0.0005<	2.500
831006	1030	11341	0.30	0101	42.0			1.30				2.900
831102	1000	11348	0.30	0101	31.0		0.0010	0.70	0.001<W		0.0005<	2.600
MAXIMUM		0.30			42.0	0.100	0.0010	1.30	0.001		0.0015	4.500
ARITH MEAN		0.30			35.1	0.100	0.0010	0.95	0.001<A		0.0010	2.875
GEOM MEAN					34.5			0.91	0.001<A			2.762
MINIMUM		0.30			25.0	0.100	0.0010	0.60	0.001		0.0006	1.500
STD DEV (GEOM *)					6.7			0.28	0.000<A			0.850
# SAMP IN STATISTICS		8			8	1	1	8	4		3	8
% SAMP (EXCLUDED)							80				40	

*INTERIM TEST-NAME:		COLAP	COND25	COUT	CRUT	CUUT	DO	FCMF	FEUT	FVPH	FWSTRC	
								FECAL COLIFORM	IRON			
SAMPLE DATE YYMMDD	HOUR LMT	SAMPLE NUMBER	COLOUR APPARENT HZU	CONDUCT. 25C UMHO/CM AT 25 C	COBALT UNF.TOT. MG/L AS CO	CHROMIUM UNF.TOT. MG/L AS CR	COPPER UNF.TOT. MG/L AS CU	DISOLVED OXYGEN MG/L AS O	MF CNT /100ML	UNF.TOT. MG/L AS FE	PH FIELD	STREAM COND.
830207	1455	11305	54.000	76.0	0.0020<	0.0020<	0.0050	11.6	2500	0.1600	7.4	4
830505	1730	11311	91.000	110.0	0.0020<	0.0020<	0.0010	10.4	100<	0.4100	7.5	8
830608	1220	11317	119.000	112.0				10.5	30AID		7.7	
830706	1130	11323	115.000	86.0	0.0020<	0.0020<	0.0010	8.0	20AID	0.4900	7.2	
830811	1000	11329	63.000	76.0				7.3	10AID		7.0	8
830914	1500	11335	189.000	99.0	0.0020<	0.0020<	0.0020	7.4	10<	0.4400	7.4	8
831006	1030	11341	168.000	107.0				8.9	70AID		7.1	8
831102	1000	11348	97.000	82.0	0.0020<	0.0020<	0.0020	11.0	30AID	0.3300	7.1	8
MAXIMUM		189.000		112.0			0.0050	11.6	2500	0.4900	7.7	
ARITH MEAN		112.000		93.5			0.0022	9.4	443	0.3660	7.3	
GEOM MEAN		103.382		92.4			0.0018	9.2		0.3418	7.3	
MINIMUM		54.000		76.0			0.0010	7.3	10	0.1600	7.0	
STD DEV (GEOM *)		47.138		15.3			0.0016	1.7		0.1290	0.2	
# SAMP IN STATISTICS		8		8			5	8	6	5	8	
% SAMP (EXCLUDED)									25			

(CONTD)

1983 WATER QUALITY DATA REGION 6

154

B.O.W./ SITE: RAINY RIVER

STATION ID: 19-0001-009-02

SAMPLE POINT: DNSTR.FROM CONFLUENCE WITH BAUDETTE R.

STATION TYPE: RIVER

MAJOR BASIN: ARCTIC DRAINAGE NELSON RIVER

STORET CODE: 05

MINOR BASIN: LAKE WINNIPEG EAST RAINY RIVER

001

LAT: 48 43 10.93 LONG: 094 35 28.91

U T M: 15 0382950.0 5397300.0 4

REGION: 06

DISTANCE: 225.946

*=INTERIM TEST-NAME:			FWTEMP	HARDT	HGUT	MNUT	NIUT	PBUT	PH	PP04FR	PPUT	RSP
			WATER	HARDNESS	MERCURY	MANGANESE	NICKEL	LEAD		P04	PHOSPHOR	
SAMPLE	DATE	DATE	TEMP	TOTAL	UNF.TOT.	UNF.TOT.	UNF.TOT.	UNF.TOT.		FIL.REAC	UNF.TOT.	RESIDUE
YYMMDD	LMT	NUMBER	DEG.C	MG/L	UG/L	MG/L	MG/L	MG/L		MG/L	MG/L	PARTIC.
				AS CACO3	AS HG	AS MN	AS NI	AS PB	PH	AS P	AS P	MG/L
830207	1455	11305	0.2	29.000	0.050<	0.007	0.002	0.003<	6.90	0.005	0.025	3.00
830505	1730	11311	8.0	45.000	0.050<	0.032	0.003	0.003<	7.50	0.005	0.034	6.00
830608	1220	11317	15.0	51.000					7.30	0.006	0.036	5.00
830706	1130	11323	20.0	39.000		0.027	0.002	0.004	7.20	0.010	0.036	9.00
830811	1000	11329	22.5	29.000	0.050<				7.10	0.002	0.024	4.00
830914	1500	11335	19.0	48.000	0.050<	0.029	0.002<	0.003<	7.20	0.011	0.041	5.00
831006	1030	11341	10.0	53.000					7.10	0.010	0.038	6.00
831102	1000	11348	8.0	36.000	0.050<	0.016	0.002<	0.003	7.00	0.007	0.023	3.00
MAXIMUM			22.5	53.000		0.032	0.003	0.004	7.50	0.011	0.041	9.00
ARITH MEAN			12.8	41.250		0.022	0.002	0.003	7.16	0.007	0.032	5.12
GEOM MEAN			8.0	40.254		0.019			7.16	0.006	0.031	4.82
MINIMUM			0.2	29.000		0.007	0.002	0.003	6.90	0.002	0.023	3.00
STD DEV (GEOM *)			7.6	9.453		0.010			0.18	0.003	0.007	1.96
# SAMP IN STATISTICS			8	8		5	3	2	8	8	8	8
% SAMP (EXCLUDED)							40	60				
*=INTERIM TEST-NAME:			RST	TCMF	TCMFBK	TURB	ZNUT					
			RESIDUE	COLIFORM	COLIFORM							
SAMPLE	DATE	DATE	TOTAL	TOTAL	TOTAL							
YYMMDD	LMT	NUMBER	MG/L	MF	MF	TURB'ITY	ZINC					
				CNT	CNT	FTU	UNF.TOT.					
				/100ML	/100ML		MG/L					
							AS ZN					
830207	1455	11305	85.00	15000>	100000>	1.50	0.0060					
830505	1730	11311	110.00	100<	1100	3.10	0.0020					
830608	1220	11317	130.00	80AID	3300	3.00						
830706	1130	11323	120.00	200AID	2900	3.80	0.0020					
830811	1000	11329	80.00	600AID	7000	1.60						
830914	1500	11335	170.00	100AID	4100	3.00	0.0020					
831006	1030	11341	150.00	400AID	4000	3.30						
831102	1000	11348	80.00	210	1800	2.50	0.0020					
MAXIMUM			170.00	600	7000	3.80	0.0060					
ARITH MEAN			115.62	265	3457	2.72	0.0028					
GEOM MEAN			111.45			2.60	0.0025					
MINIMUM			80.00	80	1100	1.50	0.0020					
STD DEV (GEOM *)			33.53			0.81	0.0018					
# SAMP IN STATISTICS			8	6	7	8	5					
% SAMP (EXCLUDED)				25	12							

1983 WATER QUALITY DATA REGION 6

155

B.O.W./ SITE: RAINY RIVER

SAMPLE POINT: UPSTR.FROM CONFLUENCE WITH BAUDETTE R.

STATION TYPE: RIVER

STATION ID: 19-0001-010-02

MAJOR BASIN: ARCTIC DRAINAGE NELSON RIVER
MINOR BASIN: LAKE WINNIPEG EAST RAINY RIVERSTORET CODE: 05
001

LAT: 48 42 58.13 LONG: 094 33 18.81

U T M: 15 0385600.0 5396850.0 4

REGION: 06

DISTANCE: 228.521

*=INTERIM TEST-NAME:		FMSADP	FGPROJ	ALKT	BOD5	CCNAUR	CCNFUR	CLIDUR	COLAP	COND25	DO
				ALK	BOD	CYANIDE	CYANIDE	CHLORIDE			
				TOTAL	5 DAY	AVAIL	FREE				
SAMPLE			SAMPLE	PROJECT	TOT.DEM.	UNF.REAC	UNF.REAC	UNF.REAC	COLOUR	CONDUCT.	DISOLVED
DATE	HOUR	SAMPLE	DEPTH	SUB-PROJ	MG/L	MG/L	MG/L	MG/L	APPARENT	25C	OXYGEN
YYMMDD	LMT	NUMBER	M	CODE	AS CAC03	AS O	AS HCN	AS HCN	AS CL-	UMHO/CM	MG/L
										AT 25 C	AS O
830207	1430	11304	0.30	0101	26.0	1.00			3.100	52.000	78.0
830504	1715	11310	0.30	0101	37.0	1.00			3.300	86.000	104.0
830608	1235	11316	0.30	0101	41.0	1.00			4.400	117.000	111.0
830706	1105	11322	0.30	0101	37.0	0.50			1.600	113.000	89.0
830811	1030	11328	0.30	0101	29.0	0.80			2.500	68.000	79.0
830914	1440	11334	0.30	0101	40.0	1.00	0.001<W	0.001<W	2.500	190.000	98.0
831006	1040	11340	0.30	0101	42.0	1.30			3.000	168.000	112.0
831102	0945	11347	0.30	0101	32.0	0.50			2.700	97.000	86.0
		MAXIMUM	0.30		42.0	1.30	0.001	0.001	4.400	190.000	112.0
		ARITH MEAN	0.30		35.5	0.89	0.001<A	0.001<A	2.887	111.375	94.6
		GEOM MEAN			35.0	0.85			2.788	102.775	93.8
		MINIMUM	0.30		26.0	0.50	0.001	0.001	1.600	52.000	78.0
		STD DEV (GEOM *)			5.9	0.27			0.803	47.328	13.6
# SAMP IN STATISTICS			8		8	8	1	1	8	8	8
% SAMP (EXCLUDED)											

*=INTERIM TEST-NAME:		FCMF	FWPH	FWSTRC	FWTEMP	HARDT	PH	PP04FR	PPUT	RSP	RST
		FECAL									
		COLIFORM									
SAMPLE		MF				HARDNESS		P04	PHOSPHOR	RESIDUE	RESIDUE
DATE	HOUR	CNT	PH	STREAM	WATER	TOTAL		FIL.REAC	UNF.TOT.	PARTIC.	TOTAL
YYMMDD	LMT	/100ML	FIELD	COND.	TEMP	MG/L	AS CAC03	MG/L	MG/L	MG/L	MG/L
					DEG.C			AS P	AS P		
830207	1430	11304	7.2	4	0.5	30.000		0.003	0.023	5.00	80.00
830504	1715	11310	7.3	8	8.0	43.000		0.005	0.032	6.00	90.00
830608	1235	11316	7.7	8	14.0	49.000		0.007	0.038	7.00	130.00
830706	1105	11322	7.5	8	19.5	43.000		0.010	0.036	10.00	110.00
830811	1030	11328	7.1	8	23.0	34.000		0.004	0.026	4.00	150.00
830914	1440	11334	7.4	8	19.0	47.000		0.007	0.043	5.00	130.00
831006	1040	11340	7.2	8	10.0	53.000		0.012	0.036	6.00	140.00
831102	0945	11347	7.1	8	7.5	37.000		0.007	0.024	3.00	90.00
		MAXIMUM	50	7.7	23.0	53.000	7.40	0.012	0.043	10.00	150.00
		ARITH MEAN	22	7.3	12.7	42.000	7.17	0.007	0.032	5.75	115.00
		GEOM MEAN		7.3	8.8	41.332	7.17	0.006	0.032	5.43	112.30
		MINIMUM	10	7.1	0.5	30.000	6.80	0.003	0.023	3.00	80.00
		STD DEV (GEOM *)		0.2	7.5	7.838	0.18	0.003	0.007	2.12	26.19
# SAMP IN STATISTICS			5	8	8	8	8	8	8	8	8
% SAMP (EXCLUDED)			37								

(C O N T D)

1983 WATER QUALITY DATA REGION 6

156

B.O.W./ SITE: RAINY RIVER

STATION ID: 19-0001-010-02

SAMPLE POINT: UPSTR.FROM CONFLUENCE WITH BAUDETTE R.

STATION TYPE: RIVER

MAJOR BASIN: ARCTIC DRAINAGE NELSON RIVER

STORET CODE: 05

MINOR BASIN: LAKE WINNIPEG EAST RAINY RIVER

001

LAT: 48 42 58.13 LONG: 094 33 18.81

U T M: 15 0385600.0 5396850.0 4 REGION: 06

DISTANCE: 228.521

SAMPLE		DATE	HOUR	SAMPLE NUMBER	TCHF	TCHF BK	TURB
TEST-NAME:					COLIFORM	COLIFORM	
				TOTAL	TOTAL MF		
				MF	BCKGRD		
				CNT	CNT	TURB'ITY	
				/100ML	/100ML	FTU	
830207	1430			11304	9100	8900	1.50
830504	1715			11310	100<	500AID	3.10
830608	1235			11316	90AID	2900	3.20
830706	1105			11322	2100C	30000	4.70
830811	1030			11328	200AID	6000	1.60
830914	1440			11334	200AID	6900	3.20
831006	1040			11340	200AID	3600	3.40
831102	0945			11347	160	1800	2.70
				MAXIMUM	9100	30000	4.70
				ARITH MEAN	1721	7575	2.92
				GEOM MEAN		4237	2.75
				MINIMUM	90	500	1.50
				STD DEV (GEOM *)		3*	1.03
				# SAMP IN STATISTICS	7	8	8
				% SAMP (EXCLUDED)	12		

157

STORET CODE: 05
001

DISTANCE: 308.606

*INTERIM		TEST-NAME:	CLIDUR	COLAP	COLTR	COND25	COUT	CRUT	CUUT	DO	FCMF	FEUT
			CHLORIDE			CONDUCT.	COBALT	CHROMIUM	COPPER	DISOLVED	FECAL	IRON
SAMPLE			UNF.REAC	COLOUR	COLOUR	25C	UNF.TOT.	UNF.TOT.	UNF.TOT.	OXYGEN	MF	UNF.TOT.
DATE	HOUR	SAMPLE	MG/L	APPARENT	TRUE	UMHO/CM	MG/L	MG/L	MG/L	MG/L	CNT	MG/L
YYMMDD	LMT	NUMBER	AS CL-	HZU	HZU	AT 25 C	AS CO	AS CR	AS CU	AS O	/100ML	AS FE
830208	0945	11302	3.100	54.000		65.0	0.0020<	0.0020<	0.0020	12.0	7000AID	0.1000
830505	1000	11308	3.700	81.000		81.0	0.0020<	0.0020	0.0020	10.3	100<	0.3900
830608	1345	11314	5.600	106.000		100.0				9.5	40AID	
830706	0940	11320	1.500	82.000		76.0	0.0020<	0.0020<	0.0030	7.4	30AID	0.4500
830811	0900	11326	3.500	59.000		77.0				6.7	20AID	
830914	1330	11332	3.400	121.000	121.000	90.0	0.0020<	0.0020<	0.0030	7.0	160	0.4300
831006	0930	11338	3.400	118.000		97.0				9.1	40AID	
831102	0940	11345	2.800	70.000		70.0	0.0020<	0.0020<	0.0060	11.4	70AID	0.2600
MAXIMUM			5.600	121.000	121.000	100.0		0.0020	0.0060	12.0	7000	0.4500
ARITH MEAN			3.375	86.375	121.000	82.0		0.0020	0.0032	9.2	1051	0.3260
GEOM MEAN			3.197	82.952		81.2			0.0029	9.0		0.2874
MINIMUM			1.500	54.000	121.000	65.0		0.0020	0.0020	6.7	20	0.1000
STD DEV (GEOM *)			1.134	25.906		12.6			0.0016	2.0		0.1464
# SAMP IN STATISTICS			8	8	1	8		1	5	8	7	5
% SAMP (EXCLUDED)								80			12	

(C O N T D)

1983 WATER QUALITY DATA REGION 6

158

B.O.W./ SITE: RAINY RIVER
 SAMPLE POINT: ABOVE EMO
 STATION TYPE: RIVER

STATION ID: 19-0001-011-02

MAJOR BASIN: ARCTIC DRAINAGE NELSON RIVER
 MINOR BASIN: LAKE WINNIPEG EAST RAINY RIVER

STORET CODE: 05
 001

LAT: 48 37 33.67 LONG: 093 50 02.01 U T M: 15 0438550.0 5386000.0 4 REGION: 06 DISTANCE: 308.606

*INTERIM TEST-NAME:		FMPH	FWSTRC	FWTEMP	HARDT	HGUT	MNUT	NIUT	PBUT	PH	PP04FR
SAMPLE					HARDNESS	MERCURY	MANGANESE	NICKEL	LEAD		P04
DATE	HOUR	SAMPLE	PH	STREAM	WATER	UNF.TOT.	UNF.TOT.	UNF.TOT.	UNF.TOT.		FIL.REAC
YYMMDD	LMT	NUMBER	FIELD	COND.	TEMP	MG/L	UG/L	MG/L	MG/L		MG/L
					DEG.C	AS CAC03	AS HG	AS MN	AS NI	AS PB	AS P
830208	0945	11302	7.0	4	0.5	24.000	0.050<	0.008	0.002<	0.003<	0.005
830505	1000	11308	7.3	8	6.0	30.000	0.050<	0.016	0.004	0.003<	0.007
830608	1345	11314	7.4		14.5	41.000					0.009
830706	0940	11320	7.4		18.0	34.000		0.030	0.002<	0.003<	0.010
830811	0900	11326	6.8	8	22.0	31.000	0.050<				0.010
830914	1330	11332	7.2	8	18.5	40.000	0.050<	0.025	0.002<	0.003<	0.011
831006	0930	11338	7.3	8	11.0	41.000					0.012
831102	0940	11345	7.1	8	8.0	28.000	0.050<	0.019	0.002<	0.003<	0.007
MAXIMUM		7.4			22.0	41.000		0.030	0.004		0.012
ARITH MEAN		7.2			12.3	33.625		0.020	0.004		0.009
GEOM MEAN		7.2			8.5	33.065		0.018			0.009
MINIMUM		6.8			0.5	24.000		0.008	0.004		0.005
STD DEV (GEOM *)		0.2			7.3	6.479		0.008			0.002
# SAMP IN STATISTICS		8			8	8		5	1		8
% SAMP (EXCLUDED)									80		

*INTERIM TEST-NAME:		PPUT	RSP	RST	TCMF	TCMFBK	TURB	ZNUT
SAMPLE		PHOSPHOR	RESIDUE	RESIDUE	COLIFORM	COLIFORM		ZINC
DATE	HOUR	UNF.TOT.	PARTIC.	TOTAL	TOTAL	HF	TURB'ITY	UNF.TOT.
YYMMDD	LMT	MG/L	MG/L	MG/L	MG/L	CNT	FTU	MG/L
		AS P				/100ML		AS ZN
830208	0945	11302	0.020	2.00	60.00	43000	5000AID	0.95
830505	1000	11308	0.032	5.00	95.00	100AID	2200	3.00
830608	1345	11314	0.039	10.00	110.00	200AID	6500	5.00
830706	0940	11320	0.032	8.00	85.00	800AID	7700	3.50
830811	0900	11326	0.026	2.00	110.00	300C	35000	1.40
830914	1330	11332	0.041	8.00	120.00	400AID	8100	5.10
831006	0930	11338	0.038	8.00	130.00	300AID	4100	4.20
831102	0940	11345	0.025	3.00	85.00	500AID	2900	2.40
MAXIMUM		0.041	10.00	130.00	43000	35000	5.10	0.0150
ARITH MEAN		0.032	5.75	99.37	5700	8937	3.19	0.0100
GEOM MEAN		0.031	4.85	96.90	578	6075	2.78	0.0082
MINIMUM		0.020	2.00	60.00	100	2200	0.95	0.0020
STD DEV (GEOM *)		0.008	3.15	22.59	6*	2*	1.55	0.0054
# SAMP IN STATISTICS		8	8	8	8	8	8	5
% SAMP (EXCLUDED)								

1983 WATER QUALITY DATA REGION 6

159

B.O.W./ SITE: RAINY RIVER

SAMPLE POINT: DOWNSTREAM FROM FORT FRANCES, NORTH

STATION TYPE: RIVER

STATION ID: 19-0001-012-02

MAJOR BASIN: ARCTIC DRAINAGE NELSON RIVER
MINOR BASIN: LAKE WINNIPEG EAST RAINY RIVERSTORET CODE: 05
001

LAT: 48 32 39.69 LONG: 093 28 59.29

U T M: 15 0464340.0 5376700.0 4

REGION: 06

DISTANCE: 328.297

*=INTERIM TEST-NAME:		FWSADP	FGPROJ	ACDT	ALKT	ALUT	ASUT	BOD5	CCNAUR	CCNFUR	CDUT
				ACIDITY	ALK	ALUMINUM	ARSENIC	BOD	CYANIDE	CYANIDE	
				TOTAL	TOTAL	UNF.TOT.	UNF.TOT.	5 DAY	AVAIL	FREE	CADMIUM
SAMPLE DATE	HOUR	SAMPLE	PROJECT	MG/L	MG/L	MG/L	MG/L	TOT.DEM.	UNF.REAC	UNF.REAC	UNF.TOT.
YYMMDD	LMT	NUMBER	SUB-PROJ	AS CAC03	AS CAC03	AS AL	AS AS	MG/L	MG/L	MG/L	MG/L
			CODE					AS O	AS HCN	AS HCN	AS CD
830208	1455	11301		0.30	19.0	0.050	0.0010<	1.10	0.001<W	0.001<W	0.0005<
830505	0910	11307		0.30	18.0		0.0010<	1.60	0.001<W	0.001<W	0.0006
830608	1500	11313	0101	0.30	23.0			1.60			
830706	0900	11319	0101	0.30	21.0		0.0010<	0.50			0.0015
830811	1210	11325	0101	0.30	22.0			1.90			
830914	1210	11331	0101	0.30	23.0		0.0010<	1.10	0.001<W	0.001<W	0.0005<
831006	1205	11337	0101	0.30	30.0			1.50			
831102	1500	11344	0101	0.30	22.0		0.0010	0.80	0.001<W		0.0005<
MAXIMUM		0.30		4.000	30.0	0.050	0.0010	1.90	0.001	0.001	0.0015
ARITH MEAN		0.30		2.857	22.2	0.050	0.0010	1.26	0.001<A	0.001<A	0.0010
GEOM MEAN				2.784	22.0			1.17	0.001<A	0.001<A	
MINIMUM		0.30		2.000	18.0	0.050	0.0010	0.50	0.001	0.001	0.0006
STD DEV (GEOM *)				0.690	3.6			0.47	0.000<A	0.000<A	
# SAMP IN STATISTICS		8		7	8	1	1	8	4	3	2
% SAMP (EXCLUDED)							80				60

*=INTERIM TEST-NAME:		CLIDUR	COLAP	COND25	COUT	CRUT	CUUT	DO	FCMF	FEUT	FVPH	
		CHLORIDE	COLOUR	CONDUCT.	COBALT	CHROMIUM	COPPER	DISSOLVED	FECAL	IRON		
		UNF.REAC	APPARENT	25C	UNF.TOT.	UNF.TOT.	UNF.TOT.	OXYGEN	COLIFORM	UNF.TOT.	PH	
SAMPLE DATE	HOUR	MG/L	HZU	UMHO/CM	MG/L	MG/L	MG/L	MG/L	MF	MG/L	FIELD	
YYMMDD	LMT	AS CL-		AT 25 C	AS CO	AS CR	AS CU	AS O	CNT	AS FE		
									/100ML			
830208	1455	11301	3.000	55.000	63.0	0.0020<	0.0020<	0.0010	11.7	10000	0.0880	7.1
830505	0910	11307	3.500	59.000	66.0	0.0020<	0.0020	0.0010	11.9	200AID	0.1500	7.5
830608	1500	11313	7.200	86.000	86.0				10.4	1000AID		7.7
830706	0900	11319	1.500	53.000	59.0	0.0020<	0.0020<	0.0010	8.4	20AID	0.2400	7.4
830811	1210	11325	4.600	68.000	74.0				8.5	40		8.7
830914	1210	11331	4.500	61.000	76.0	0.0020<	0.0020<	0.0030	7.8	200	0.1400	7.4
831006	1205	11337	3.800	68.000	91.0				9.8	110		7.3
831102	1500	11344	2.100	56.000	64.0	0.0020<	0.0020<	0.0020	12.2	50AID	0.1700	7.1
MAXIMUM		7.200	86.000	91.0		0.0020	0.0030	12.2	10000	0.2400	8.7	
ARITH MEAN		3.775	63.250	72.4		0.0020	0.0016	10.1	1452	0.1576	7.5	
GEOM MEAN		3.420	62.527	71.6			0.0014	10.0	191	0.1498	7.5	
MINIMUM		1.500	53.000	59.0		0.0020	0.0010	7.8	20	0.0880	7.1	
STD DEV (GEOM *)		1.756	10.767	11.5			0.0009	1.7	7*	0.0551	0.5	
# SAMP IN STATISTICS		8	8	8		1	5	8	8	5	8	
% SAMP (EXCLUDED)						80						

(C O N T D)

1983 WATER QUALITY DATA REGION 6

160

B.O.W./ SITE: RAINY RIVER

STATION ID: 19-0001-012-02

SAMPLE POINT: DOWNSTREAM FROM FORT FRANCES, NORTH

STATION TYPE: RIVER

MAJOR BASIN: ARCTIC DRAINAGE NELSON RIVER

STORET CODE: 05

MINOR BASIN: LAKE WINNIPEG EAST RAINY RIVER

001

LAT: 48 32 39.69 LONG: 093 28 59.29

U T M: 15 0464340.0 5376700.0 4

REGION: 06

DISTANCE: 328.297

*=INTERIM TEST-NAME:		FWSTRC	FWTEMP	HARDT	HGUT	MNUT	NIUT	PBUT	PH	PP04FR	PPUT	
SAMPLE			WATER	HARDNESS	MERCURY	MANGANESE	NICKEL	LEAD		PO4	PHOSPHOR	
DATE	HOUR	SAMPLE	TEMP	TOTAL	UNF.TOT.	UNF.TOT.	UNF.TOT.	UNF.TOT.		FIL.REAC	UNF.TOT.	
YYMMDD	LMT	NUMBER	DEG.C	MG/L	UG/L	MG/L	MG/L	MG/L		MG/L	MG/L	
				AS CAC03	AS HG	AS MN	AS NI	AS PB	PH	AS P	AS P	
830208	1455	11301	4	0.5	23.000	0.050<	0.006	0.002<	0.003<	6.90	0.004	0.021
830505	0910	11307	8	4.0	22.000	0.010<	0.011	0.003	0.003<	7.10	0.004	0.026
830608	1500	11313		17.0	27.000					6.90	0.007	0.028
830706	0900	11319	8 6	18.0	21.000		0.009	0.002<	0.003<	7.00	0.004	0.019
830811	1210	11325	8	23.0	27.000	0.050<				7.60	0.006	0.036
830914	1210	11331	8 6 9	19.0	26.000	0.050<	0.011	0.002	0.003<	7.10	0.006	0.034
831006	1205	11337	8	10.0	37.000					7.20	0.008	0.031
831102	1500	11344	8	8.0	25.000	0.050<	0.010	0.002	0.003<	7.10	0.003	0.023
MAXIMUM				23.0	37.000		0.011	0.003		7.60	0.008	0.036
ARITH MEAN				12.4	26.000		0.009	0.002		7.11	0.005	0.027
GEOM MEAN				8.2	25.632		0.009			7.11	0.005	0.027
MINIMUM				0.5	21.000		0.006	0.002		6.90	0.003	0.019
STD DEV (GEOM *)				8.0	4.986		0.002			0.22	0.002	0.006
# SAMP IN STATISTICS				8	8		5	3		8	8	8
% SAMP (EXCLUDED)								40				

*=INTERIM TEST-NAME:		RSP	RST	TCHF	TCHFBK	TURB	ZNUT	
SAMPLE		RESIDUE	RESIDUE	COLIFORM	COLIFORM		ZINC	
DATE	HOUR	PARTIC.	TOTAL	TOTAL	TOTAL		UNF.TOT.	
YYMMDD	LMT	MG/L	MG/L	MF	MF	TURB'ITY	MG/L	
				CNT	CNT	FTU	AS ZN	
				/100ML	/100ML			
830208	1455	11301	2.00	55.00	22000AID	1000AID	1.20	0.0020
830505	0910	11307	3.00	55.00	500AID	3300	1.80	0.0010
830608	1500	11313	7.00	95.00	800AID	7900	3.60	
830706	0900	11319	5.00	85.00	400AID	6100	2.40	0.0020
830811	1210	11325	7.00	100.00	500AID	16000	2.30	
830914	1210	11331	3.00	65.00	200AID	14400	2.40	0.0010
831006	1205	11337	4.00	110.00	1600	12600	3.10	
831102	1500	11344	4.00	70.00	80AID	760	2.30	0.0010<
MAXIMUM		7.00	110.00	22000	16000	3.60	0.0020	
ARITH MEAN		4.37	79.37	3260	7757	2.39	0.0015	
GEOM MEAN		4.04	76.90	679	4933	2.28		
MINIMUM		2.00	55.00	80	760	1.20	0.0010	
STD DEV (GEOM *)		1.85	21.12	5*	3*	0.73		
# SAMP IN STATISTICS		8	8	8	8	8	4	
% SAMP (EXCLUDED)							20	

1983 WATER QUALITY DATA REGION 6

161

B.O.W./ SITE: CHUKUNI RIVER
 SAMPLE POINT: DOWNSTREAM FROM BALMER CREEK
 STATION TYPE: RIVER

STATION ID: 19-0001-015-02

MAJOR BASIN: ARCTIC DRAINAGE NELSON RIVER
 MINOR BASIN: LAKE WINNIPEG EAST WINNIPEG RIVER
 TERM STREAM: ENGLISH RIVER

STORET CODE: 05
 001
 1890

LAT: 51 01 28.80 LONG: 093 43 32.70

U T M: 15 0449100.0 5652600.0 4

REGION: 06

DISTANCE: 277.765

*INTERIM TEST-NAME:		FWSADP	FGPROJ	ACDT	ALKT	ASUT	BOD5	CCNAUR	CCNFUR	CDUT	CLIDUR	
				ACIDITY	ALK	ARSENIC	BOD	CYANIDE	CYANIDE			
				TOTAL	TOTAL	UNF.TOT.	5 DAY	AVAIL	FREE	CADMIUM	CHLORIDE	
				MG/L	MG/L	MG/L	TOT.DEM.	UNF.REAC	UNF.REAC	UNF.TOT.	UNF.REAC	
				AS CAC03	AS CAC03	AS AS	MG/L	MG/L	MG/L	MG/L	MG/L	
				AS CAC03	AS CAC03	AS AS	AS O	AS HCN	AS HCN	AS CD	AS CL-	
830125	1045	11505	0.30	0101	4.000	25.0	0.0060	1.80	0.001<W	0.001<W	0.0005<	1.100
830329	0940	11512	0.30	0101	2.000	26.0	0.0060	1.90	0.001<W	0.001<W	0.0010	0.800
830607	1230	11526	0.30	0101	2.000	27.0	0.0460	0.70	0.038	0.018	0.0005<	3.500
830705		11533	0.30	0101	2.000	26.0	0.026	0.80	0.003NTR	0.001<W	0.001	1.700
830809	1020	11540	0.30	0101	5.000	24.0	0.0350	0.80	0.002<T	0.001<W	0.0010	1.400
830913		11547	0.30	0101	2.000	26.0	0.0190	0.70	0.001<W	0.001<W	0.0005<	1.100
831004	1030	11554	0.30	0101	3.000	25.0	0.0160	0.90	0.001		0.0005	2.000
MAXIMUM		0.30			5.000	27.0	0.0460	1.90	0.038	0.018	0.0010	3.500
ARITH MEAN		0.30			2.857	25.6	0.022	1.09	0.007<A	0.004<A	0.001	1.657
GEOM MEAN					2.667	25.6	0.017	0.99	0.002<A	0.002<A		1.488
MINIMUM		0.30			2.000	24.0	0.0060	0.70	0.001	0.001	0.0005	0.800
STD DEV (GEOM *)					1.215	1.0	0.015	0.53	0.014<A	0.007<A		0.907
# SAMP IN STATISTICS		7			7	7	7	7	7	6	4	7
% SAMP (EXCLUDED)											42	

*INTERIM TEST-NAME:		COLAP	COND25	COUT	CUUT	DO	FCMF	FEUT	FWPH	FWSTRC	FWTEMP
							FECAL				
			CONDUCT.	COBALT	COPPER	DISOLVED	COLIFORM	IRON			
			25C	UNF.TOT.	UNF.TOT.	OXYGEN	MF	UNF.TOT.			
			UMHO/CM	MG/L	MG/L	MG/L	CNT	MG/L	PH	STREAM	WATER
			AT 25 C	AS CO	AS CU	AS O	/100ML	AS FE	FIELD	COND.	TEMP
											DEG.C
830125	1045	11505	38.000	67.0	0.0020<	0.0040	14.0	0.0420	7.4	4	0.1
830329	0940	11512	37.000	65.0	0.0030	0.0040	13.6	0.0750	7.4	4	1.0
830607	1230	11526	44.000	94.0	0.0040	0.0460	11.0	0.2400	7.4	8	10.0
830705		11533	39.000	73.0	0.002 <	0.018	8.8	0.140	7.4	6 8	16.0
830809	1020	11540	41.000	71.0	0.0030	0.0070	7.7	0.1800	7.4	8	22.5
830913		11547	39.000	64.0	0.0020<	0.0040	9.9	0.1600	7.4	6 7 8	17.5
831004	1030	11554	34.000	72.0	0.0020<	0.0050	9.9	0.1400	7.1	8	9.5
MAXIMUM		44.000	94.0	0.0040	0.0460	14.0	10	0.2400	7.4		22.5
ARITH MEAN		38.857	72.3	0.0033	0.013	10.7	10	0.140	7.4		10.9
GEOM MEAN		38.749	71.7		0.008	10.5		0.123	7.4		4.8
MINIMUM		34.000	64.0	0.0030	0.0040	7.7	10	0.0420	7.1		0.1
STD DEV (GEOM *)		3.132	10.2		0.016	2.4		0.066	0.1		8.4
# SAMP IN STATISTICS		7	7	3	7	7	1	7	7		7
% SAMP (EXCLUDED)				57			80				

(CONTD)

1983 WATER QUALITY DATA REGION 6

162

B.O.W./ SITE: CHUKUNI RIVER
 SAMPLE POINT: DOWNSTREAM FROM BALMER CREEK
 STATION TYPE: RIVER

STATION ID: 19-0001-015-02

MAJOR BASIN: ARCTIC DRAINAGE NELSON RIVER
 MINOR BASIN: LAKE WINNIPEG EAST WINNIPEG RIVER
 TERM STREAM: ENGLISH RIVER

STORET CODE: 05
 001
 1890

LAT: 51 01 28.80 LONG: 093 43 32.70

U T M: 15 0449100.0 5652600.0 4

REGION: 06

DISTANCE: 277.765

*=INTERIM TEST-NAME:		HARDT	HGUT	MNUT	NIUT	NNHFR NH3-N TOTAL	NNKUR KJELDAHL ORGANIC	NN02FR NO2-N FIL.REAC	NN03FR NO3-N FIL.REAC	NNTKUR K'DAHL N TOTAL	PBUT LEAD UNF.TOT.
SAMPLE DATE HOUR YYMMDD LMT	SAMPLE NUMBER	HARDNESS TOTAL MG/L AS CAC03	MERCURY UNF.TOT. UG/L AS HG	MANGANESE UNF.TOT. MG/L AS MN	NICKEL UNF.TOT. MG/L AS NI	FIL.REAC MG/L AS N	UNF.REAC MG/L AS N	FIL.REAC MG/L AS N	FIL.REAC MG/L AS N	UNF.REAC MG/L AS N	UNF.TOT. MG/L AS PB
830125 1045	11505	26.000	0.050<	0.003	0.005	0.040		0.001	0.070	0.770	0.003 <
830329 0940	11512	27.000	0.050<	0.003	0.004	0.070		0.001	0.060	0.560	0.003
830607 1230	11526	36.000		0.021	0.055	0.170		0.014	0.210	0.640	0.0030<
830705	11533	28.000		0.010	0.019	0.030	0.480	0.009	0.130	0.480	0.003 <
830809 1020	11540	29.000	0.050<	0.020	0.0130	0.030		0.003	0.030	0.460	0.003 <
830913	11547	30.000	0.050<	0.013	0.007	0.040		0.001	0.010<	0.460	0.003 <
831004 1030	11554	29.000	0.050<	0.011	0.008	0.020		0.003	0.040	0.430	0.003 <
	MAXIMUM	36.000		0.021	0.055	0.170	0.480	0.014	0.210	0.770	0.003
	ARITH MEAN	29.286		0.012	0.016	0.057	0.480	0.005	0.090	0.543	0.003
	GEOM MEAN	29.143		0.009	0.011	0.044		0.003		0.532	
	MINIMUM	26.000		0.003	0.004	0.020	0.480	0.001	0.030	0.430	0.003
	STD DEV (GEOM *)	3.251		0.007	0.018	0.052		0.005		0.124	
	# SAMP IN STATISTICS	7		7	7	7	1	7	6	7	1
	% SAMP (EXCLUDED)								14		85
*=INTERIM TEST-NAME:		PH	PP04FR	PPUT	RSP	RST	SIO3UR	SS04UR	TCMF COLIFORM TOTAL	TCMFBK COLIFORM TOTAL MF	TURB TURB*ITY FTU
SAMPLE DATE HOUR YYMMDD LMT	SAMPLE NUMBER	PH	P04 FIL.REAC MG/L AS P	PHOSPHOR UNF.TOT. MG/L AS P	RESIDUE PARTIC. MG/L	RESIDUE TOTAL MG/L	SILICATE UNF.REAC MG/L AS SI	SULPHATE UNF.REAC MG/L AS S04	COLIFORM TOTAL MF /100ML	COLIFORM TOTAL MF BCKGRD CNT /100ML	TURB*ITY FTU
830125 1045	11505	7.30	0.002	0.021	1.00	70.00	1.000	3.300			0.40
830329 0940	11512	7.30	0.002	0.022	1.00	70.00	1.000	3.100			0.35
830607 1230	11526	7.20	0.005	0.023	5.00	100.00	0.300	9.200	10<	190	1.90
830705	11533	7.30	0.041	0.016	2.00	75.00	0.300	6.300	80	780	0.90
830809 1020	11540	7.20	0.004	0.025	3.00	95.00	0.500	4.900	110C	2900	1.40
830913	11547	7.60	0.007	0.025	5.00	90.00	0.600	3.100	20AID	530	2.40
831004 1030	11554	7.40	0.001	0.024	2.00	80.00	0.700	4.800	30AID	570	1.70
	MAXIMUM	7.60	0.041	0.025	5.00	100.00	1.000	9.200	110	2900	2.40
	ARITH MEAN	7.33	0.009	0.022	2.71	82.86	0.629	4.957	60	994	1.29
	GEOM MEAN	7.33	0.004	0.022	2.26	82.10	0.567	4.595		665	1.05
	MINIMUM	7.20	0.001	0.016	1.00	70.00	0.300	3.100	20	190	0.35
	STD DEV (GEOM *)	0.14	0.014	0.003	1.70	12.20	0.293	2.216		3*	0.78
	# SAMP IN STATISTICS	7	7	7	7	7	7	7	4	5	7
	% SAMP (EXCLUDED)								20		

(CONTD)

1983 WATER QUALITY DATA REGION 6

163

B.O.W./ SITE: CHUKUNI RIVER
 SAMPLE POINT: DOWNSTREAM FROM BALMER CREEK
 STATION TYPE: RIVER

STATION ID: 19-0001-015-02

MAJOR BASIN: ARCTIC DRAINAGE NELSON RIVER
 MINOR BASIN: LAKE WINNIPEG EAST WINNIPEG RIVER
 TERM STREAM: ENGLISH RIVER

STORET CODE: 05
 001
 1890

LAT: 51 01 28.80 LONG: 093 43 32.70

U T M: 15 0449100.0 5652600.0 4

REGION: 06

DISTANCE: 277.765

*=INTERIM TEST-NAME: ZNUT
 ZINC
 SAMPLE UNF.TOT.
 DATE HOUR SAMPLE MG/L
 YYMMDD LHT NUMBER AS ZN

830125	1045	11505	0.0040
830329	0940	11512	0.0010<
830607	1230	11526	0.0130
830705		11533	0.005
830809	1020	11540	0.0040
830913		11547	0.0010
831004	1030	11554	0.001
		MAXIMUM	0.0130
		ARITH MEAN	0.005
		GEOM MEAN	
		MINIMUM	0.0010
		STD DEV (GEOM *)	
		# SAMP IN STATISTICS	6
		% SAMP (EXCLUDED)	14

1983 WATER QUALITY DATA REGION 6

164

B.O.W./ SITE: BALMER CREEK
 SAMPLE POINT: AT BALMER LAKE OUTLET
 STATION TYPE: RIVER

STATION ID: 19-0001-016-02

MAJOR BASIN: ARCTIC DRAINAGE NELSON RIVER
 MINOR BASIN: LAKE WINNIPEG EAST WINNIPEG RIVER
 TERM STREAM: ENGLISH RIVER

STORET CODE: 05
 001
 1890

LAT: 51 03 38.23 LONG: 093 43 43.71

U T M: 15 0448925.0 5656600.0 4

REGION: 06

DISTANCE: 283.400

*INTERIM TEST-NAME:		FWSADP	FGPROJ	ACDT	ALKT	ASUT	BOD5	CCNAUR	CCNFUR	CDUT	CLIDUR
				ACIDITY	ALK	ARSENIC	5 DAY	CYANIDE	CYANIDE		
SAMPLE DATE	HOUR	SAMPLE	SAMPLE	PROJECT	TOTAL	TOTAL	TOT.DEM.	UNF.REAC	UNF.REAC	UNF.TOT.	UNF.REAC
YYMMDD	LMT	NUMBER	DEPTH	SUB-PROJ	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
			M	CODE	AS CAC03	AS CAC03	AS AS	AS O	AS HCN	AS HCN	AS CL-
830125	0815	11501	0.30	0101	7.000	79.0	0.5200	1.30	0.350	0.185	0.0005<
830329	0850	11508	0.30	0101	7.000	78.0	0.4600	2.10	0.640	0.130	0.0020
830504	0830	11515	0.30		3.000	49.0	0.420	3.40	2.65	2.08	0.0005<
830607	1040	11522	0.30	0101	6.000	75.0	0.7200	3.50	1.390	0.990	0.0005<
830705	0840	11529	0.30	0101	3.000	74.0	0.6700	2.10	0.450	0.060	0.0015
830809	1250	11536	0.30	0101	11.000	68.0	0.6500	3.30	0.035	0.008	0.0010
830913	0910	11543	0.30	0101	7.000	71.0	0.4400	6.10	0.070	0.001<T	0.0005<
831004	1230	11550	0.30	0101	7.000	67.0	0.5000	1.00	0.140		0.0007

MAXIMUM	0.30		11.000	79.0	0.7200	6.10	2.65	2.08	0.0020	172.000
ARITH MEAN	0.30		6.375	70.1	0.547	2.85	0.72	0.49 <A	0.0013	57.000
GEOM MEAN			5.879	69.5	0.537	2.47	0.33	0.08 <A		46.973
MINIMUM	0.30		3.000	49.0	0.420	1.00	0.035	0.001	0.0007	27.000
STD DEV (GEOM *)			2.560	9.6	0.116	1.62	0.90	0.78 <A		48.101
# SAMP IN STATISTICS	8		8	8	8	8	8	7	4	8
% SAMP (EXCLUDED)									50	

*INTERIM TEST-NAME:		COLAP	COND25	COUT	CUUT	DO	FCMF	FEUT	FVPH	FWSTRC	FWTEMP
			CONDUCT.	COBALT	COPPER	DISOLVED	FECAL	IRON			
SAMPLE DATE	HOUR	SAMPLE	COLOUR	25C	UNF.TOT.	UNF.TOT.	COLIFORM	UNF.TOT.	PH	STREAM	WATER
YYMMDD	LMT	NUMBER	APPARENT	UMHO/CM	MG/L	MG/L	MF	MG/L	FIELD	COND.	TEMP
			HZU	AT 25 C	AS CO	AS CU	CNT	AS FE			DEG.C
830125	0815	11501		625.0	0.0890	0.0370	4<	0.7500	7.2	4	0.1
830329	0850	11508		1060.0	0.0810	0.4200	4<	1.0000	7.2	4	0.1
830504	0830	11515	74.000	355.0	0.053	0.200	4<	0.600	7.2	3	2.0
830607	1040	11522	95.000	510.0	0.1000	1.2000	4<	1.6000	7.7	6	10.0
830705	0840	11529	98.000	455.0	0.0840	0.7400	4	1.6000	7.6	6 3	16.0
830809	1250	11536	104.000	458.0	0.0940	0.5000	4	0.5300	6.9	6	22.0
830913	0910	11543	94.000	472.0	0.0870	0.4000	16	0.3500	7.3	6	14.0
831004	1230	11550	98.000	530.0	0.1000	0.4400	4<	0.3700	7.4	6	7.5

MAXIMUM	104.000	1060.0	0.1000	1.2000	12.2	16	1.6000	7.7		22.0
ARITH MEAN	93.833	558.1	0.086	0.492	8.2	8	0.850	7.3		9.0
GEOM MEAN	93.310	530.3	0.085	0.353	7.9		0.728	7.3		3.0
MINIMUM	74.000	355.0	0.053	0.0370	5.2	4	0.3500	6.9		0.1
STD DEV (GEOM *)	10.323	216.7	0.015	0.353	2.5		0.507	0.3		8.1
# SAMP IN STATISTICS	6	8	8	8	8	3	8	8		8
% SAMP (EXCLUDED)						62				

(CONT D)

1983 WATER QUALITY DATA REGION 6

165

B.O.W./ SITE: BALMER CREEK
 SAMPLE POINT: AT BALMER LAKE OUTLET
 STATION TYPE: RIVER

STATION ID: 19-0001-016-02

MAJOR BASIN: ARCTIC DRAINAGE NELSON RIVER
 MINOR BASIN: LAKE WINNIPEG EAST WINNIPEG RIVER
 TERM STREAM: ENGLISH RIVER

STORET CODE: 05
 001
 1890

LAT: 51 03 38.23 LONG: 093 43 43.71

U T M: 15 0448925.0 5656600.0 4

REGION: 06

DISTANCE: 283.400

*=INTERIM TEST-NAME:		HARDT	HGUT	MNUT	NIUT	NNHTFR	NNO2FR	NNO3FR	NNTKUR	PBUT	PH
		HARDNESS	MERCURY	MANGANESE	NICKEL	NH3-N	NO2-N	NO3-N	K'DAHL N	LEAD	
		TOTAL	UNF.TOT.	UNF.TOT.	UNF.TOT.	TOTAL	FIL.REAC	FIL.REAC	UNF.REAC	UNF.TOT.	
SAMPLE	DATE	MG/L	UG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	PH
DATE	TIME	AS CAC03	AS HG	AS MN	AS NI	AS N	AS N	AS N	AS N	AS PB	
YMMDD LMT	NUMBER										
830125 0815	11501	200.000	0.060	0.180	0.740	1.500	0.150	5.400	3.500	0.003 <	7.30
830329 0850	11508	335.000	0.070	0.290	0.680	2.200	0.260	5.700	4.300	0.016	7.40
830504 0830	11515	101.000	0.050	0.130	0.630	1.600	0.59	2.900	4.300	0.003 <	7.30
830607 1040	11522	143.000		0.170	1.200	3.900	0.150	3.200	6.400	0.0040	7.80
830705 0840	11529	132.000		0.140	0.920	3.900	0.150	3.200	6.000	0.004	7.70
830809 1250	11536	136.000	0.050<	0.150	0.8300	2.800	0.081	3.400	4.600	0.011	7.20
830913 0910	11543	142.000	0.050<	0.160	0.790	1.700	0.190	4.100	3.200	0.003 <	7.20
831004 1230	11550	146.000	0.050<	0.180	1.000	2.000	0.054	4.500	3.500	0.003 <	7.60
	MAXIMUM	335.000	0.070	0.290	1.200	3.900	0.59	5.700	6.400	0.016	7.80
	ARITH MEAN	166.875	0.060	0.175	0.849	2.450	0.20	4.050	4.475	0.009	7.44
	GEOM MEAN	156.517		0.170	0.832	2.293	0.16	3.934	4.349		7.43
	MINIMUM	101.000	0.050	0.130	0.630	1.500	0.054	2.900	3.200	0.0040	7.20
	STD DEV (GEOM *)	73.189		0.050	0.186	0.984	0.17	1.065	1.173		0.23
	# SAMP IN STATISTICS	8	3	8	8	8	8	8	8	4	8
	% SAMP (EXCLUDED)		50							50	

*=INTERIM TEST-NAME:		PP04FR	PPUT	RSP	RST	SI03UR	SS04UR	TCHF	TCMFBK	TURB	ZNUT
		P04	PHOSPHOR			SILICATE	SULPHATE	COLIFORM	COLIFORM		ZINC
		FIL.REAC	UNF.TOT.	RESIDUE	RESIDUE	UNF.REAC	UNF.REAC	TOTAL	TOTAL MF		UNF.TOT.
		MG/L	MG/L	PARTIC.	TOTAL	MG/L	MG/L	MF	BCKGRD	TURB'ITY	MG/L
SAMPLE	DATE	AS P	AS P	MG/L	MG/L	AS SI	AS S04	/100ML	/100ML	FTU	AS ZN
DATE	TIME										
YMMDD LMT	NUMBER										
830125 0815	11501	0.025	0.088	3.00	470.00	4.500	93.000	10AID	70AID	6.90	0.2000
830329 0850	11508	0.017	0.050	4.00	760.00	4.200	13.000	40AID	290	7.20	0.1900
830504 0830	11515	0.016	0.035	4.00	240.00		59.000	10AID	80AID	5.30	0.200
830607 1040	11522	0.030	0.110	20.00	350.00	3.100	85.000	10<	10AID	20.00	0.3300
830705 0840	11529	0.040	0.075	20.00	340.00	2.900	17.000	50AID	460	22.00	0.1700
830809 1250	11536	0.018	0.057	6.00	330.00	3.000	82.000	14100C	50000	4.10	0.0770
830913 0910	11543	0.022	0.050	6.00	350.00	2.900	88.000	14000	57000	3.40	0.0600
831004 1230	11550	0.019	0.051	4.00	350.00	3.400	99.000	900AID	3900	4.10	0.071
	MAXIMUM	0.040	0.110	20.00	760.00	4.500	99.000	14100	57000	22.00	0.3300
	ARITH MEAN	0.023	0.064	8.37	398.75	3.429	67.000	4159	13976	9.12	0.162
	GEOM MEAN	0.022	0.061	6.39	377.50	3.379	54.123		733	7.12	0.139
	MINIMUM	0.016	0.035	3.00	240.00	2.900	13.000	10	10	3.40	0.0600
	STD DEV (GEOM *)	0.008	0.025	7.25	158.60	0.658	34.163		23*	7.47	0.091
	# SAMP IN STATISTICS	8	8	8	8	7	8	7	8	8	8
	% SAMP (EXCLUDED)							12			

1983 WATER QUALITY DATA REGION 6

166

B.O.W./ SITE: SNIB LAKE CREEK
 SAMPLE POINT: AT SNIB LAKE OUTLET
 STATION TYPE: RIVER

STATION ID: 19-0001-017-02

MAJOR BASIN: ARCTIC DRAINAGE NELSON RIVER
 MINOR BASIN: LAKE WINNIPEG EAST WINNIPEG RIVER
 TERM STREAM: ENGLISH RIVER

STORET CODE: 05
 001
 1890

LAT: 51 00 12.74 LONG: 093 51 28.67

U T M: 15 0439800.0 5650350.0 4

REGION: 06

DISTANCE: 299.008

*INTERIM TEST-NAME:		FWSADP	FGPROJ	ACDT	ALKT	ASUT	BOD5	CCNAUR	CCNFUR	CDUT	CLIDUR
				ACIDITY	ALK	ARSENIC	BOD	CYANIDE	CYANIDE		
				TOTAL	TOTAL	UNF.TOT.	5 DAY	AVAIL	FREE	CADMIUM	CHLORIDE
SAMPLE		SAMPLE	PROJECT	MG/L	MG/L	MG/L	TOT.DEM.	UNF.REAC	UNF.REAC	UNF.TOT.	UNF.REAC
DATE	HR	DEPT	SUB-PROJ	AS CAC03	AS CAC03	AS AS	MG/L	MG/L	MG/L	MG/L	MG/L
YYMMDD	LMT	NUMBER	CODE	AS CAC03	AS CAC03	AS AS	AS O	AS HCN	AS HCN	AS CD	AS CL-
830124	1650	11504	0101	5.000	30.0	0.0740	0.80	0.001<T	0.001<W	0.0005<	6.400
830328	1735	11511	0101	6.000	30.0	0.0660	0.70	0.001<W	0.001<W	0.0010	5.500
830504	0750	11518	0101	3.000	19.0	0.0410	1.00	0.001<W	0.001<W	0.0005<	5.100
830607	0945	11525	0101	3.000	24.0	0.0410	0.90	0.001<W	0.001<W	0.0005<	6.400
830705	0815	11532	0101	4.000	26.0	0.0510	0.90	0.001<W	0.001<W	0.0001	8.100
830809	1220	11539	0101	4.000	24.0	0.0840	1.70	0.002<T	0.001<W	0.0005<	6.400
830913	0830	11546	0101	3.000	29.0	0.1200	0.60	0.001<W	0.001<W	0.0005<	6.500
831004	1210	11553	0101	3.000	26.0	0.0970	0.80	0.001		0.0006	6.500
MAXIMUM		0.30		6.000	30.0	0.1200	1.70	0.002	0.001	0.0010	8.100
ARITH MEAN		0.30		3.875	26.0	0.0717	0.92	0.001<A	0.001<A	0.0006	6.362
GEOM MEAN				3.747	25.7	0.0671	0.88	0.001<A	0.001<A		6.311
MINIMUM		0.30		3.000	19.0	0.0410	0.60	0.001	0.001	0.0001	5.100
STD DEV (GEOM *)				1.126	3.7	0.0280	0.34	0.000<A	0.000<A		0.878
# SAMP IN STATISTICS		8		8	8	8	8	8	7	3	8
% SAMP (EXCLUDED)										62	

*INTERIM TEST-NAME:		COLAP	COND25	COUT	CUUT	DO	FEUT	FPH	FWSTRC	FWTEMP	HARDT	
		COLOUR	CONDUCT.	COBALT	COPPER	DISOLVED	IRON				HARDNESS	
		APPARENT	25C	UNF.TOT.	UNF.TOT.	OXYGEN	UNF.TOT.			WATER	TOTAL	
SAMPLE		UMHO/CM	MG/L	MG/L	MG/L	MG/L	MG/L	PH	STREAM	TEMP	MG/L	
DATE	HR	AT 25 C	AS CO	AS CU	AS O	AS FE	FIELD	COND.	DEG.C	AS CAC03		
YYMMDD	LMT	NUMBER	AS CO	AS CU	AS O	AS FE	FIELD	COND.	DEG.C	AS CAC03		
830124	1650	11504	92.000	134.0	0.0020<	0.0180	13.0	0.1800	7.2	4	0.5	50.000
830328	1735	11511	93.000	128.0	0.0030	0.0170	10.2	0.2200	6.8		1.0	47.000
830504	0750	11518	62.000	91.0	0.0020<	0.0110	10.6	0.1300	7.2	8	2.5	35.000
830607	0945	11525	78.000	108.0	0.0020<	0.0150	9.7	0.1800	7.1	8	11.5	41.000
830705	0815	11532	82.000	109.0	0.0020<	0.0140	8.2	0.1200	7.0	8	17.5	40.000
830809	1220	11539	82.000	109.0	0.0020	0.0140	7.4	0.1500	6.9	8	24.5	43.000
830913	0830	11546	77.000	112.0	0.0020	0.0210	8.5	0.5400	7.3		16.0	42.000
831004	1210	11553	61.000	114.0	0.0020<	0.0150	8.4	0.3000	7.3	8	9.0	43.000
MAXIMUM		93.000	134.0	0.0030	0.0210	13.0	0.5400	7.3		24.5	50.000	
ARITH MEAN		78.375	113.1	0.0023	0.0156	9.5	0.2275	7.1		10.3	42.625	
GEOM MEAN		77.540	112.5		0.0154	9.4	0.2014	7.1		5.5	42.415	
MINIMUM		61.000	91.0	0.0020	0.0110	7.4	0.1200	6.8		0.5	35.000	
STD DEV (GEOM *)		11.940	13.1		0.0030	1.8	0.1386	0.2		8.7	4.502	
# SAMP IN STATISTICS		8	8	3	8	8	8	8		8	8	
% SAMP (EXCLUDED)				62								

(C O N T D)

1983 WATER QUALITY DATA REGION 6

167

B.O.W./ SITE: SNIB LAKE CREEK
 SAMPLE POINT: AT SNIB LAKE OUTLET
 STATION TYPE: RIVER

STATION ID: 19-0001-017-02

MAJOR BASIN: ARCTIC DRAINAGE NELSON RIVER
 MINOR BASIN: LAKE WINNIPEG EAST WINNIPEG RIVER
 TERM STREAM: ENGLISH RIVER

STORET CODE: 05
 001
 1890

LAT: 51 00 12.74 LONG: 093 51 28.67 U T M: 15 0439800.0 5650350.0 4 REGION: 06 DISTANCE: 299.008

*INTERIM		TEST-NAME:	HGUT	MNUT	NIUT	NNHTFR	NN02FR	NN03FR	NNTKUR	PBUT	PH	PP04FR
			MERCURY	MANGANESE	NICKEL	NH3-N			K'DAHL N			
			UNF.TOT.	UNF.TOT.	UNF.TOT.	TOTAL			TOTAL			P04
SAMPLE			UG/L	MG/L	MG/L	FIL.REAC	FIL.REAC	FIL.REAC	UNF.REAC	UNF.TOT.		FIL.REAC
DATE	HR	SAMPLE	AS HG	AS MN	AS NI	AS N	AS N	AS N	AS N	AS PB	PH	AS P
YYMMDD	LMT	NUMBER										
830124	1650	11504	0.050<	0.016	0.009	0.030	0.003	0.070	0.750	0.003<	7.10	0.003
830328	1735	11511	0.050<	0.018	0.010	0.010<	0.003	0.110	0.570	0.005	6.80	0.009
830504	0750	11518	0.050<	0.015	0.005	0.020	0.003	0.010	0.560	0.003<	7.00	0.003
830607	0945	11525		0.014	0.007	0.020	0.004	0.010<	0.500	0.003<	7.20	0.004
830705	0815	11532		0.013	0.009	0.020	0.003	0.010<	0.580	0.003	7.10	0.004
830809	1220	11539	0.050<	0.039	0.008	0.020	0.004	0.010<	0.540	0.003<	7.10	0.003
830913	0830	11546	0.050<	0.170	0.011	0.010	0.002	0.010<	0.530	0.003<	7.30	0.014
831004	1210	11553	0.050<	0.036	0.008	0.010<	0.003	0.010<	0.550	0.003<	7.40	0.013
MAXIMUM				0.170	0.011	0.030	0.004	0.110	0.750	0.005	7.40	0.014
ARITH MEAN				0.040	0.008	0.020	0.003	0.063	0.572	0.004	7.12	0.007
GEOM MEAN				0.026	0.008		0.003		0.569		7.12	0.005
MINIMUM				0.013	0.005	0.010	0.002	0.010	0.500	0.003	6.80	0.003
STD DEV (GEOM *)				0.053	0.002		0.001		0.076		0.18	0.005
# SAMP IN STATISTICS				8	8	6	8	3	8	2	8	8
% SAMP (EXCLUDED)						25		62		75		

*INTERIM TEST-NAME:		PPUT PHOSPHOR	RSP	RST	SI03UR SILICATE	SS04UR SULPHATE	TURB	ZNUT ZINC
		UNF.TOT. MG/L	RESIDUE PARTIC. MG/L	RESIDUE TOTAL MG/L	UNF.REAC MG/L	UNF.REAC MG/L	TURB'ITY FTU	UNF.TOT. MG/L
SAMPLE DATE	HR	SAMPLE NUMBER	AS P		AS SI	AS S04		AS ZN
YYMMDD	LMT							
830124	1650	11504	0.029	1.00	120.00	2.000	17.000	0.0060
830328	1735	11511	0.026	1.00	130.00	2.400	16.000	0.0050
830504	0750	11518	0.028	2.00	65.00	1.600	13.000	0.0050
830607	0945	11525	0.018	2.00	110.00	1.700	14.000	0.0050
830705	0815	11532	0.019	2.00	120.00	1.600	85.000	0.0040
830809	1220	11539	0.021	1.00	120.00	1.500	14.000	0.0040
830913	0830	11546	0.039	3.00	130.00	1.600	13.000	0.0070
831004	1210	11553	0.047	2.00	120.00	1.800	15.000	0.003
MAXIMUM			0.047	3.00	130.00	2.400	85.000	0.0070
ARITH MEAN			0.028	1.75	114.37	1.775	23.375	0.005
GEOM MEAN			0.027	1.62	112.17	1.756	18.094	0.005
MINIMUM			0.018	1.00	65.00	1.500	13.000	0.003
STD DEV (GEOM *)			0.010	0.71	20.95	0.296	24.940	0.001
# SAMP IN STATISTICS			8	8	8	8	8	8
% SAMP (EXCLUDED)								

1983 WATER QUALITY DATA REGION 6

168

B.O.W./ SITE: RED LAKE
 SAMPLE POINT: IN BRUCE CHANNEL NEAR FERRY CROSSING
 STATION TYPE: RIVER

STATION ID: 19-0001-018-01

MAJOR BASIN: ARCTIC DRAINAGE NELSON RIVER
 MINOR BASIN: LAKE WINNIPEG EAST WINNIPEG RIVER
 TERM STREAM: ENGLISH RIVER

STORET CODE: 05
 001
 1890

LAT: 51 04 03.41 LONG: 093 49 34.76

U T M: 15 0442100.0 5657450.0 4

REGION: 06

DISTANCE: 288.030

*INTERIM TEST-NAME:		FWSADP	FGPROJ	ACDT	ALKT	ASUT	BOD5	CCNAUR	CCNFUR	CDUT	CLIDUR
				ACIDITY	ALK	ARSENIC	5 DAY	CYANIDE	CYANIDE	CADMIUM	CHLORIDE
SAMPLE DATE	HOUR	SAMPLE	PROJECT	TOTAL	TOTAL	UNF.TOT.	TOT.DEM.	UNF.REAC	UNF.REAC	UNF.TOT.	UNF.REAC
YYMMDD	LMT	NUMBER	SUB-PROJ	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
			CODE	AS CAC03	AS CAC03	AS AS	AS O	AS HCN	AS HCN	AS CD	AS CL-
830125	0940	11503	0101	3.000	27.0	0.0050	0.50	0.001<T	0.001<W	0.0021	0.900
830329	0830	11510	0101	2.000	26.0	0.0040	2.40	0.001<W	0.001<W	0.0010	0.700
830607	1255	11524	0101	3.000	23.0	0.0050	0.50	0.001<W	0.001<W	0.0005<	0.700
830705	1100	11531	0101	3.000	25.0	0.0060	0.50	0.001<W	0.001<W	0.0002	0.600
830809	0920	11538	0101	5.000	22.0	0.0110	0.70	0.001<W	0.001<W	0.0015	0.700
830913	1155	11545	0101	2.000	24.0	0.0130	0.50	0.001<W	0.001<W	0.0005<	0.700
831004	1005	11552	0101	3.000	23.0	0.0130	0.50	0.001<W	0.001<W	0.0005<	0.700
MAXIMUM		0.30		5.000	27.0	0.0130	2.40	0.001	0.001	0.0021	0.900
ARITH MEAN		0.30		3.000	24.3	0.0081	0.80	0.001<A	0.001<A	0.0012	0.714
GEOM MEAN				2.874	24.2	0.0073	0.66	0.001<A	0.001<A		0.710
MINIMUM		0.30		2.000	22.0	0.0040	0.50	0.001	0.001	0.0002	0.600
STD DEV (GEOM *)				1.000	1.8	0.0040	0.71	0.000<A	0.000<A		0.090
# SAMP IN STATISTICS		7		7	7	7	7	7	7	4	7
% SAMP (EXCLUDED)										42	

*INTERIM TEST-NAME:		COLAP	COND25	COUT	CUUT	DO	FCMF	FEUT	FVPH	FWSTRC	FWTEMP	
							FECAL	IRON				
SAMPLE DATE	HOUR	COLOUR	CONDUCT.	COBALT	COPPER	DISOLVED	COLIFORM	UNF.TOT.			WATER	
YYMMDD	LMT	APPARENT	25C	UNF.TOT.	UNF.TOT.	OXYGEN	MF	MG/L	PH	STREAM	TEMP	
		HZU	UMHO/CM	MG/L	MG/L	MG/L	CNT	AS FE	FIELD	COND.	DEG.C	
			AT 25 C	AS CO	AS CU	AS O	/100ML					
830125	0940	11503	42.000	71.0	0.0020<	0.0030	14.0	4<	0.0580	7.2	4	0.0
830329	0830	11510	58.000	66.0	0.0020<	0.0030	14.0	4<	0.1100	7.0	4	1.0
830607	1255	11524	43.000	59.0	0.0020<	0.0020	12.0	4<	0.1000	7.4		7.0
830705	1100	11531	37.000	59.0	0.0020<	0.0010	8.8	4<	0.0820	7.3	8	15.0
830809	0920	11538	33.000	59.0	0.0020<	0.0010	7.8	4<	0.0850	7.4	8	22.5
830913	1155	11545	39.000	59.0	0.0020<	0.0020	9.0	4	0.0740	7.2	8	18.0
831004	1005	11552	39.000	61.0	0.0020<	0.0010	8.8	4<	0.1500	6.8	8	11.0
MAXIMUM		58.000	71.0		0.0030	14.0	4	0.1500	7.4			22.5
ARITH MEAN		41.571	62.0		0.0019	10.6	4	0.0941	7.2			10.6
GEOM MEAN		40.993	61.9		0.0017	10.4		0.0904	7.2			
MINIMUM		33.000	59.0		0.0010	7.8	4	0.0580	6.8			0.0
STD DEV (GEOM *)		7.955	4.7		0.0009	2.6		0.0299	0.2			
# SAMP IN STATISTICS		7	7		7	7	1	7	7			7
% SAMP (EXCLUDED)							85					

(CONT'D)

STORET CODE: 05
001
1890

DISTANCE: 288.030

*INTERIM		TEST-NAME:	PP04FR	PPUT	RSP	RST	SI03UR	SS04UR	TCMF	TCMFBK	TURB	ZNUT
			P04	PHOSPHOR			SILICATE	SULPHATE	COLIFORM	COLIFORM		ZINC
SAMPLE	DATE	HR	FIL.REAC	UNF.TOT.	RESIDUE	RESIDUE	UNF.REAC	UNF.REAC	TOTAL	TOTAL MF		UNF.TOT.
DATE	HR		MG/L	MG/L	PARTIC.	TOTAL	MG/L	MG/L	MF	BCKGRD		MG/L
YYMMDD	LMT	SAMPLE	AS P	AS P	MG/L	MG/L	AS SI	AS S04	CNT	CNT	TURB'ITY	AS ZN
		NUMBER							/100ML	/100HL	FTU	
830125	0940	11503	0.005	0.016	1.00	80.00	1.200	3.500	4<	4	0.50	0.0030
830329	0830	11510	0.001	0.023	2.00	95.00	1.300	2.100	10<	10<	0.50	0.0020
830607	1255	11524	0.002	0.013	1.00	60.00	0.300	2.300	10<	50AID	0.45	0.0020
830705	1100	11531	0.004	0.008	2.00	65.00	0.300	3.700	10<	440	0.55	0.0020
830809	0920	11538	0.002	0.014	1.00	80.00	0.400	3.100	30AID	240	0.85	0.0040
830913	1155	11545	0.003	0.015	2.00	40.00	0.600	2.900	10<	190	1.20	0.0020
831004	1005	11552	0.006	0.025	2.00	70.00	0.800	3.600	20AID	150	1.40	0.001
		MAXIMUM	0.006	0.025	2.00	95.00	1.300	3.700	30	440	1.40	0.0040
		ARITH MEAN	0.003	0.016	1.57	70.00	0.700	3.029	25	179	0.78	0.002
		GEOM MEAN	0.003	0.015	1.49	67.88	0.597	2.967			0.71	0.002
		MINIMUM	0.001	0.008	1.00	40.00	0.300	2.100	20	4	0.45	0.001
		STD DEV (GEOM *)	0.002	0.006	0.53	17.56	0.416	0.634			0.38	0.001
#	SAMP IN STATISTICS		7	7	7	7	7	7	2	6	7	7
	% SAMP (EXCLUDED)								71	14		

1983 WATER QUALITY DATA REGION 6

170

B.O.W./ SITE: BALMER CREEK
 SAMPLE POINT: 500 FEET UPSTREAM OF CHUKUNI RIVER
 STATION TYPE: RIVER

STATION ID: 19-0001-032-02

MAJOR BASIN: ARCTIC DRAINAGE NELSON RIVER
 MINOR BASIN: LAKE WINNIPEG EAST WINNIPEG RIVER
 TERM STREAM: ENGLISH RIVER

STORET CODE: 05
 001
 1890

LAT: 51 01 48.00 LONG: 093 44 08.94 U T M: 15 0448400.0 5653200.0 4 REGION: 06 DISTANCE: 278.731

*INTERIM TEST-NAME:		FWSADP	FGPROJ	ACDT	ALKT	ASUT	BOD5	CCNAUR	CCNFUR	CDUT	CLIDUR			
				ACIDITY	ALK	ARSENIC	BOD	CYANIDE	CYANIDE	CADMIUM	CHLORIDE			
				TOTAL	TOTAL	UNF.TOT.	5 DAY	AVAIL	FREE	UNF.REAC	UNF.REAC			
				MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L			
				AS CAC03	AS CAC03	AS AS	AS O	AS HCN	AS HCN	AS CD	AS CL-			
SAMPLE DATE	YMHDD LMT	YMHDD LMT	DEPTH	PROJECT	SUB-PROJ	CODE	AS CAC03	AS CAC03	AS AS	AS O	AS HCN	AS HCN	AS CD	AS CL-
830125	1030	11500	0.30	0101			7.000	60.0	0.3500	1.20	0.250	0.175	0.0009	88.000
830329	0925	11507	0.30	0101			7.000	56.0	0.2600	2.70	0.240	0.035	0.0020	103.000
830607	1220	11521	0.30	0101			5.000	71.0	0.6200	2.00	0.720	0.590	0.0005<	34.000
830705	1125	11528	0.30	0101			10.000	67.0	0.780	4.50	0.250<T	0.001<W	0.002	30.000
830809	1040	11535	0.30	0101			13.000	68.0	0.7900	1.80	0.020	0.004<T	0.0010	33.000
830913	1105	11542	0.30	0101			8.000	73.0	0.4800	1.10	0.100	0.001<T	0.0005<	61.000
831004	1045	11549	0.30	0101			10.000	59.0	0.5000	2.80	0.080		0.0008	76.000
MAXIMUM		0.30					13.000	73.0	0.7900	4.50	0.720	0.590	0.002	103.000
ARITH MEAN		0.30					8.571	64.9	0.540	2.30	0.237<A	0.134<A	0.001	60.714
GEOM MEAN							8.226	64.6	0.505	2.07	0.150<A	0.016<A		54.425
MINIMUM		0.30					5.000	56.0	0.2600	1.10	0.020	0.001	0.0008	30.000
STD DEV (GEOM *)							2.637	6.5	0.203	1.17	0.232<A	0.233<A		29.415
# SAMP IN STATISTICS		7					7	7	7	7	7	6	5	7
% SAMP (EXCLUDED)													28	

*INTERIM TEST-NAME:		COLAP	COND25	COUT	CUUT	DO	FCHF	FEUT	FMPH	FWSTRC	FWTEMP
			CONDUCT.	COBALT	COPPER	DISOLVED	FECAL	IRON			
			25C	UNF.TOT.	UNF.TOT.	OXYGEN	COLIFORM	UNF.TOT.			
			UMHO/CM	MG/L	MG/L	MG/L	HF	MG/L			
			AT 25 C	AS CO	AS CU	AS O	CNT	AS FE	PH	STREAM	WATER
							/100ML		FIELD	COND.	TEMP
											DEG.C
830125	1030	11500		655.0	0.0470	0.2600	4<	1.1000	7.3	4	0.1
830329	0925	11507	75.000	705.0	0.0440	0.2000	600>	0.8200	7.0	4	1.0
830607	1220	11521	109.000	460.0	0.0780	0.7500	4<	1.2000	7.6	6	12.5
830705	1125	11528	126.000	424.0	0.063 <	0.470	10AID	1.700	7.6	6	14.0
830809	1040	11535	120.000	436.0	0.0670	0.2200	60	0.6300	7.5	7	21.0
830913	1105	11542	101.000	585.0	0.0490	0.1600	36	0.3900	7.2	7	14.0
831004	1045	11549	90.000	650.0	0.0590	0.2000	44	0.6700	6.8		20.0
MAXIMUM		126.000		705.0	0.0780	0.7500	60	1.700	7.6		21.0
ARITH MEAN		103.500		559.3	0.0573	0.323	37	0.930	7.3		11.8
GEOM MEAN		101.961		548.5		0.278		0.843	7.3		5.2
MINIMUM		75.000		424.0	0.0440	0.1600	10	0.3900	6.8		0.1
STD DEV (GEOM *)		19.024		117.4		0.214		0.439	0.3		8.3
# SAMP IN STATISTICS		6		7	6	7	4	7	7		7
% SAMP (EXCLUDED)					14		42				

(CONTD)

1983 WATER QUALITY DATA REGION 6

171

B.O.W./ SITE: BALMER CREEK
 SAMPLE POINT: 500 FEET UPSTREAM OF CHUKUNI RIVER
 STATION TYPE: RIVER

STATION ID: 19-0001-032-02

MAJOR BASIN: ARCTIC DRAINAGE NELSON RIVER
 MINOR BASIN: LAKE WINNIPEG EAST WINNIPEG RIVER
 TERM STREAM: ENGLISH RIVER

STORET CODE: 05
 001
 1890

LAT: 51 01 48.00 LONG: 093 44 08.94 U T M: 15 0448400.0 5653200.0 4 REGION: 06 DISTANCE: 278.731

*INTERIM TEST-NAME:		HARDT	HGUT	MNUT	NIUT	NNHTFR NH3-N	NNKUR KJELDAHL ORGANIC	NNO2FR NO2-N	NNO3FR NO3-N	NNTKUR K'DAHL N TOTAL	PBUT LEAD
SAMPLE DATE HOUR YYMMDD LMT	SAMPLE NUMBER	HARDNESS TOTAL MG/L AS CACO3	MERCURY UNF.TOT. UG/L AS HG	MANGANSE UNF.TOT. MG/L AS MM	NICKEL UNF.TOT. MG/L AS NI	FIL.REAC MG/L AS N	UNF.REAC MG/L AS N	FIL.REAC MG/L AS N	FIL.REAC MG/L AS N	UNF.REAC MG/L AS N	UNF.TOT. MG/L AS PB
830125 1030	11500	192.000	1.300	0.160	0.380	1.400		0.130	6.000	3.400	0.040
830329 0925	11507	207.000	1.200	0.200	0.320	1.400		0.130	5.700	3.200	0.030
830607 1220	11521	139.000		0.170	0.830	1.800		0.130	2.800	4.700	0.0050
830705 1125	11528	142.000		0.130	0.600	0.100	1.900	0.053	5.000	2.000	0.007 <
830809 1040	11535	148.000	0.050<	0.160	0.4700	0.140		0.230	3.100	1.900	0.027
830913 1105	11542	191.000	0.050<	0.150	0.430	0.050		0.026	3.800	1.300	0.003 <
831004 1045	11549	206.000	0.150	0.200	0.560	0.390		0.230	7.000	1.800	0.003
MAXIMUM		207.000	1.300	0.200	0.830	1.800	1.900	0.230	7.000	4.700	0.040
ARITH MEAN		175.000	0.883	0.167	0.513	0.754	1.900	0.133	4.771	2.614	0.021
GEOM MEAN		172.626		0.165	0.491	0.371		0.107	4.536	2.397	
MINIMUM		139.000	0.150	0.130	0.320	0.050	1.900	0.026	2.800	1.300	0.003
STD DEV (GEOM *)		30.670		0.026	0.170	0.749		0.078	1.582	1.196	
# SAMP IN STATISTICS		7	3	7	7	7	1	7	7	7	5
% SAMP (EXCLUDED)			40								28

*INTERIM TEST-NAME:		PH	PP04FR P04 FIL.REAC MG/L AS P	PPUT PHOSPHOR UNF.TOT. MG/L AS P	RSP RESIDUE PARTIC. MG/L	RST RESIDUE TOTAL MG/L	SIO3UR SILICATE UNF.REAC MG/L AS SI	SIO3UR SILICATE UNF.REAC MG/L AS P	SS04UR SULPHATE UNF.REAC MG/L AS SO4	TCMF COLIFORM TOTAL MF CNT /100ML	TCMFBK COLIFORM TOTAL MF BCKGRD CNT /100ML
830125 1030	11500	7.10	0.360	0.510	8.00	490.00	3.400		79.000	20AID	90AID
830329 0925	11507	7.10	0.160	0.360	4.00	530.00	3.200		81.000	1500>	380
830607 1220	11521	7.70	0.030	0.140	10.00	350.00	2.700		79.000	10<	120
830705 1125	11528	7.10	0.041	0.086	15.00	330.00		2.600	78.000	2400AID	11400
830809 1040	11535	7.00	0.084	0.120	3.00	330.00	2.400		80.000	3000C	50000
830913 1105	11542	7.10	0.090	0.110	2.00	400.00	1.800		101.000	1900	19100
831004 1045	11549	7.10	0.120	0.200	5.00	470.00	2.300		108.000	1300	29000
MAXIMUM		7.70	0.360	0.510	15.00	530.00	3.400	2.600	108.000	3000	50000
ARITH MEAN		7.17	0.126	0.218	6.71	414.29	2.633	2.600	86.571	1724	15727
GEOM MEAN		7.17	0.094	0.179	5.46	407.34	2.576		85.864		2784
MINIMUM		7.00	0.030	0.086	2.00	330.00	1.800	2.600	78.000	20	90
STD DEV (GEOM *)		0.24	0.112	0.158	4.61	82.43	0.596		12.448		16*
# SAMP IN STATISTICS		7	7	7	7	7	6	1	7	5	7
% SAMP (EXCLUDED)										28	

(C O N T D)

1983 WATER QUALITY DATA REGION 6

172

B.O.W./ SITE: BALMER CREEK
 SAMPLE POINT: 500 FEET UPSTREAM OF CHUKUNI RIVER
 STATION TYPE: RIVER

STATION ID: 19-0001-032-02

MAJOR BASIN: ARCTIC DRAINAGE NELSON RIVER
 MINOR BASIN: LAKE WINNIPEG EAST WINNIPEG RIVER
 TERM STREAM: ENGLISH RIVER

STORET CODE: 05
 001
 1890

LAT: 51 01 48.00 LONG: 093 44 08.94

U T M: 15 0448400.0 5653200.0 4 REGION: 06

DISTANCE: 278.731

*=INTERIM TEST-NAME:		TURB	ZNUT
			ZINC
SAMPLE			UNF.TOT.
DATE	HOUR	SAMPLE TURB'ITY	MG/L
YYMMDD	LMT	NUMBER FTU	AS ZN
830125	1030	11500	9.40
830329	0925	11507	6.60
830607	1220	11521	9.20
830705	1125	11528	7.20
830809	1040	11535	2.60
830913	1105	11542	2.40
831004	1045	11549	4.80
MAXIMUM		9.40	0.2100
ARITH MEAN		6.03	0.099
GEOM MEAN		5.34	0.083
MINIMUM		2.40	0.0350
STD DEV (GEOM *)		2.87	0.062
# SAMP IN STATISTICS		7	7
% SAMP (EXCLUDED)			

1983 WATER QUALITY DATA REGION 6

173

B.O.W./ SITE: HOWEY BAY
 SAMPLE POINT: 500 FEET FROM SHORE, RED LAKE
 STATION TYPE: LAKE

STATION ID: 19-0001-033-01

MAJOR BASIN: ARCTIC DRAINAGE NELSON RIVER
 MINOR BASIN: LAKE WINNIPEG EAST WINNIPEG RIVER
 TERM STREAM: ENGLISH RIVER

STORET CODE: 05
 001
 1890

LAT: 51 01 20.96 LONG: 093 49 02.36 U T M: 15 0442675.0 5652425.0 4 REGION: 06 DISTANCE: 285.651

*INTERIM TEST-NAME:		FMSADP	FGPROJ	ACDT	ALKT	ASUT	BOD5	CCNAUR	CCNFUR	CDUT	CLIDUR
				ACIDITY	ALK	ARSENIC	BOD	CYANIDE	CYANIDE	CADMIUM	CHLORIDE
				TOTAL	TOTAL	UNF.TOT.	5 DAY	AVAIL	FREE	UNF.TOT.	UNF.REAC
SAMPLE		SAMPLE	PROJECT	MG/L	MG/L	MG/L	TOT.DEM.	UNF.REAC	UNF.REAC	MG/L	MG/L
DATE	HR	NUMBER	SUB-PROJ	AS CAC03	AS CAC03	AS AS	AS O	AS HCN	AS HCN	AS CD	AS CL-
YYMMDD	LMT		CODE								
830125	1715	11502	0101	3.000	27.0	0.0040	2.40	0.001<T	0.001<W	0.0006	1.900
830328	1720	11509	0101	2.000	26.0	0.0050	2.10	0.001<W	0.001<W	0.0010	1.000
830607	1210	11523	0101	2.000	24.0	0.0050	0.50	0.001<W	0.001<W	0.0006	1.000
830705	1005	11530	0101	3.000	25.0	0.0037	0.60	0.001<W	0.001<W	0.0001	0.700
830809	1100	11537	0101	6.000	23.0	0.0096	0.80	0.001<W	0.001<W	0.0010	0.800
830913	1040	11544	0101	3.000	25.0	0.0090	0.60	0.001<W	0.001<W	0.0005<	0.700
831004	1110	11551	0101	3.000	23.0	0.0090	1.10	0.001		0.0006	0.700
MAXIMUM		0.30		6.000	27.0	0.0096	2.40	0.001	0.001	0.0010	1.900
ARITH MEAN		0.30		3.143	24.7	0.0065	1.16	0.001<A	0.001<A	0.0006	0.971
GEOM MEAN				2.950	24.7	0.0060	0.97	0.001<A	0.001<A		0.911
MINIMUM		0.30		2.000	23.0	0.0037	0.50	0.001	0.001	0.0001	0.700
STD DEV (GEOM *)				1.345	1.5	0.0026	0.78	0.000<A	0.000<A		0.431
# SAMP IN STATISTICS		7		7	7	7	7	7	6	6	7
% SAMP (EXCLUDED)										14	

*INTERIM TEST-NAME:		COLAP	COND25	COUT	CUUT	DO	FCMF	FEUT	FVPH	FWSTRC	FWTEMP
							FECAL	IRON			
			CONDUCT.	COBALT	COPPER	DISOLVED	COLIFORM	UNF.TOT.			
		COLOUR	25C	UNF.TOT.	UNF.TOT.	OXYGEN	MF	UNF.TOT.			
SAMPLE		APPARENT	UMHO/CM	MG/L	MG/L	MG/L	CNT	MG/L	PH	STREAM	WATER
DATE	HR	H2U	AT 25 C	AS CO	AS CU	AS O	/100ML	AS FE	FIELD	COND.	TEMP
YYMMDD	LMT										DEG.C
830125	1715	11502	37.000	75.0	0.0020<	0.0040	4<	0.0420	7.1	4	0.1
830328	1720	11509	34.000	69.0	0.0020<	0.0040	4<	0.0740	7.3	4	1.0
830607	1210	11523	38.000	61.0	0.0020<	0.0020	8	0.0720	7.4		8.0
830705	1005	11530	35.000	60.0	0.0020<	0.0010	4<	0.0580	7.2	8	15.0
830809	1100	11537	30.000	60.0	0.0020<	0.0010	4	0.0550	7.5	8	23.0
830913	1040	11544	36.000	60.0	0.0020<	0.0020	4<	0.0880	7.2	8	18.0
831004	1110	11551	36.000	61.0	0.0020<	0.0020	4	0.1200	7.1	8	11.0
MAXIMUM		38.000	75.0		0.0040	14.0	8	0.1200	7.5		23.0
ARITH MEAN		35.143	63.7		0.0023	10.5	5	0.0727	7.3		10.9
GEOM MEAN		35.055	63.5		0.0020	10.2		0.0691	7.3		4.8
MINIMUM		30.000	60.0		0.0010	8.0	4	0.0420	7.1		0.1
STD DEV (GEOM *)		2.610	5.9		0.0013	2.7		0.0256	0.2		8.5
# SAMP IN STATISTICS		7	7		7	7	3	7	7		7
% SAMP (EXCLUDED)							57				

(CONTD)

1983 WATER QUALITY DATA REGION 6

174

B.O.W./ SITE: HOWEY BAY
 SAMPLE POINT: 500 FEET FROM SHORE, RED LAKE
 STATION TYPE: LAKE

STATION ID: 19-0001-033-01

MAJOR BASIN: ARCTIC DRAINAGE NELSON RIVER
 MINOR BASIN: LAKE WINNIPEG EAST WINNIPEG RIVER
 TERM STREAM: ENGLISH RIVER

STORET CODE: 05
 001
 1890

LAT: 51 01 20.96 LONG: 093 49 02.36

U T M: 15 0442675.0 5652425.0 4

REGION: 06

DISTANCE: 285.651

*=INTERIM TEST-NAME:			HARDT	HGUT	MNUT	NIUT	NNHTFR	NNO2FR	NNO3FR	NNTKUR	PBUT	PH
			HARDNESS	MERCURY	MANGANESE	NICKEL	NH3-N	NO2-N	NO3-N	K'DAHL N	LEAD	
			TOTAL	UNF.TOT.	UNF.TOT.	UNF.TOT.	TOTAL	FIL.REAC	FIL.REAC	FIL.REAC	UNF.REAC	UNF.TOT.
			MG/L	UG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
SAMPLE			AS CAC03	AS HG	AS MN	AS NI	AS N	AS N	AS N	AS N	AS PB	PH
DATE	HOUR	SAMPLE										
YYMMDD	LMT	NUMBER										
830125	1715	11502	28.000	0.050<	0.002	0.002 <	0.050	0.001	0.080	1.200	0.005	7.40
830328	1720	11509	28.000	0.050<	0.005	0.003	0.100	0.004	0.050	0.600	0.008	7.30
830607	1210	11523	27.000		0.006	0.005	0.010	0.002	0.010<	0.340	0.0030<	7.30
830705	1005	11530	25.000		0.006	0.002	0.020	0.001<	0.010<	0.340	0.003 <	7.20
830809	1100	11537	29.000	0.050<	0.006	0.0050	0.030	0.001	0.010<	0.420	0.008	7.30
830913	1040	11544	27.000	0.050<	0.023	0.002 <	0.010	0.002	0.010<	0.390	0.003 <	7.20
831004	1110	11551	26.000		0.018	0.002 <	0.010	0.003	0.010	0.420	0.003 <	7.30
MAXIMUM			29.000		0.023	0.0050	0.100	0.004	0.080	1.200	0.008	7.40
ARITH MEAN			27.143		0.009	0.004	0.033	0.002	0.047	0.530	0.007	7.29
GEOM MEAN			27.114		0.007		0.023			0.478		7.29
MINIMUM			25.000		0.002	0.002	0.010	0.001	0.010	0.340	0.005	7.20
STD DEV (GEOM *)			1.345		0.008		0.033			0.308		0.07
# SAMP IN STATISTICS			7		7	4	7	6	3	7	3	7
% SAMP (EXCLUDED)						42		14	57		57	
*=INTERIM TEST-NAME:			PP04FR	PPUT	RSP	RST	SI03UR	SS04UR	TCMF	TCMFBK	TURB	ZNUT
			P04	PHOSPHOR			SILICATE	SULPHATE	COLIFORM	COLIFORM		ZINC
			FIL.REAC	UNF.TOT.	RESIDUE	RESIDUE	UNF.REAC	UNF.REAC	TOTAL	TOTAL MF		UNF.TOT.
			MG/L	MG/L	PARTIC.	TOTAL	MG/L	MG/L	MF	BCKGRD		MG/L
			AS P	AS P	MG/L	MG/L	AS SI	AS S04	CNT	CNT	TURB'ITY	AS ZN
DATE	HOUR	SAMPLE									FTU	
YYMMDD	LMT	NUMBER										
830125	1715	11502	0.001	0.024	1.00	90.00	1.100	3.600	10<	10<	0.50	0.0080
830328	1720	11509	0.001	0.016	1.00	70.00	1.000	3.100	10<	10<	0.40	0.0090
830607	1210	11523	0.004	0.016	1.00	85.00	0.100	3.300	40AID	240	0.50	0.0010
830705	1005	11530	0.004	0.012	2.00	60.00	0.200	3.700	10<	230	0.55	0.0020
830809	1100	11537	0.001	0.016	1.00	60.00	0.300	3.300	140	920	0.70	0.0040
830913	1040	11544	0.006	0.023	2.00	65.00	0.600	2.100	10AID	390	1.20	0.0020
831004	1110	11551	0.011	0.035	2.00	70.00	0.800	4.000	10AID	170	1.30	0.001 <
MAXIMUM			0.011	0.035	2.00	90.00	1.100	4.000	140	920	1.30	0.0090
ARITH MEAN			0.004	0.020	1.43	71.43	0.586	3.300	50	390	0.74	0.0043
GEOM MEAN			0.003	0.019	1.35	70.63	0.440	3.244			0.67	
MINIMUM			0.001	0.012	1.00	60.00	0.100	2.100	10	170	0.40	0.0010
STD DEV (GEOM *)			0.004	0.008	0.53	11.80	0.398	0.608			0.36	
# SAMP IN STATISTICS			7	7	7	7	7	7	4	5	7	6
% SAMP (EXCLUDED)									42	28		14

1983 WATER QUALITY DATA REGION 6

175

B.O.W./ SITE: WABIGOON RIVER
 SAMPLE POINT: AT MINNITAKI SIDEROAD
 STATION TYPE: RIVER

STATION ID: 19-0001-035-02

MAJOR BASIN: ARCTIC DRAINAGE NELSON RIVER
 MINOR BASIN: LAKE WINNIPEG EAST WINNIPEG RIVER
 TERM STREAM: ENGLISH RIVER

STORET CODE: 05
 001
 1890

LAT: 49 51 02.00 LONG: 093 05 22.99 U T M: 15 0493550.0 5521800.0 4 REGION: 06 DISTANCE: 235.280

*INTERIM TEST-NAME:		FWSADP	FGPROJ	ALKT	ASUT	BOD5	CLIDUR	COLAP	COND25	CUUT	DO	
SAMPLE DATE	YEAR	SAMPLE DEPTH	PROJECT SUB-PROJ	ALK TOTAL	ARSENIC UNF.TOT.	BOD 5 DAY	CHLORIDE UNF.REAC	COLOUR APPARENT	CONDUCT. 25C	COPPER UNF.TOT.	DISSOLVED OXYGEN	
YYMMDD	HOUR	M	CODE	MG/L AS CAC03	MG/L AS AS	MG/L AS O	MG/L AS CL-	HZU	UMHO/CM AT 25 C	MG/L AS CU	MG/L AS O	
830105	1150	11077	0.30	0101	55.0	0.0010	1.40	1.900	61.000	126.0	0.0030	11.4
830207	1710	11081	0.30	0101	66.0	0.0010<	12.00	25.000	243.0	0.0060	10.4	
830309	1145	11085	0.30	0101	58.0	0.0010	6.20	26.000	224.0	0.0100	9.4	
830407	0945	11089	0.30	0101	52.0	0.0010<	9.00	30.000	192.000	234.0	0.0060	8.2
830502	1500	11093	0.30	0101	51.0	0.0010	4.30	25.000	141.000	208.0	0.0020	4.0
830606	1530	11097	0.30	0101	62.0	0.0010<	3.40	15.000	166.000	196.0	0.0050	6.0
830704	1440	11002	0.30	0101	66.0	0.0010<	1.20	9.200	68.000	178.0	0.0050	3.6
830808	1410	11006	0.30	0101	49.0	0.0010<	5.20	37.000	151.000	248.0	0.0030	2.0
830912	1500	11010	0.30	0101	58.0	0.0010<	1.00	18.000	80.000	187.0	0.0050	3.3
831003	1500	11014	0.30	0101	67.0	0.0130	3.60	91.000	299.000	435.0	0.0050	7.0
831101	1430	11018	0.30	0101	73.0	0.0010	4.40	90.000	368.000	472.0	0.0050	6.2
MAXIMUM		0.30			73.0	0.0130	12.00	91.000	368.000	472.0	0.0100	11.4
ARITH MEAN		0.30			59.7	0.0034	4.70	33.464	169.555	250.1	0.0050	6.5
GEOM MEAN					59.3		3.61	22.356	142.855	233.2	0.0046	5.7
MINIMUM		0.30			49.0	0.0010	1.00	1.900	61.000	126.0	0.0020	2.0
STD DEV (GEOM *)					7.7		3.38	29.825	104.839	106.6	0.0021	3.1
# SAMP IN STATISTICS		11			11	5	11	11	9	11	11	11
% SAMP (EXCLUDED)						54						

*INTERIM TEST-NAME:		FCMF	FEUT	FWPH	FWSTRC	FWTEMP	HARDT	HGUT	MNUT	NIUT	NNHTFR	
SAMPLE DATE	YEAR	FECAL COLIFORM	IRON UNF.TOT.	PH	STREAM COND.	WATER TEMP	HARDNESS TOTAL	MERCURY UNF.TOT.	MANGANSE UNF.TOT.	NICKEL UNF.TOT.	NH3-N TOTAL	
YYMMDD	HOUR	CNT /100ML	MG/L AS FE	FIELD		DEG.C	MG/L AS CAC03	UG/L AS HG	MG/L AS MN	MG/L AS NI	MG/L AS N	
830105	1150	11077	170	0.7100		4	2.0	54.000	0.007	0.015	0.002	0.090
830207	1710	11081	30AID	0.7600	7.2	4	2.0	66.000	0.010	0.044	0.002<	0.020
830309	1145	11085	500AID	0.8600	7.0	8	2.5	65.000	0.009	0.015	0.015	0.010<
830407	0945	11089	50AID	0.8100	7.0	8	6.0	59.000	0.027	0.062	0.004	0.010<
830502	1500	11093	1600	0.7300	7.2	6	6.0	59.000	0.012	0.054	0.002<	0.010<
830606	1530	11097	3000AID	1.6000	6.9	3	11.0	67.000	0.014	0.052	0.003	0.010
830704	1440	11002	3000AID	1.1000	7.1	0	19.0	59.000	0.034	0.031	0.002	0.080
830808	1410	11006	900C	0.9300		6	25.5	72.000	0.018	0.063	0.006	0.010
830912	1500	11010	200AID	0.8600	7.1	9	18.0	63.000	0.033	0.038	0.004	0.070
831003	1500	11014	36	0.9400	7.0	9	12.0	97.000	0.033	0.130	0.004	0.020
831101	1430	11018	300AID	0.7900	6.8	9	8.5	99.000	0.024	0.110	0.002<	0.120

(C O N T D)

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1983 WATER QUALITY DATA REGION 6

176

B.O.W./ SITE: WABIGOON RIVER
 SAMPLE POINT: AT MINNITAKI SIDEROAD
 STATION TYPE: RIVER

STATION ID: 19-0001-035-02

MAJOR BASIN: ARCTIC DRAINAGE NELSON RIVER
 MINOR BASIN: LAKE WINNIPEG EAST WINNIPEG RIVER
 TERM STREAM: ENGLISH RIVER

STORET CODE: 05
 001
 1890

LAT: 49 51 02.00 LONG: 093 05 22.99 U T M: 15 0493550.0 5521800.0 4 REGION: 06 DISTANCE: 235.280

*INTERIM TEST-NAME:		FECAL COLIFORM	IRON UNF.TOT.	FWPH	FWSTRC	FWTEMP	HARDT	HGUT	MNUT	NIUT	NNHTFR NH3-N TOTAL
SAMPLE DATE	HOUR	MF CNT	MG/L	PH	STREAM COND.	WATER TEMP	HARDNESS TOTAL MG/L	MERCURY UNF.TOT. UG/L	MANGANSE UNF.TOT. MG/L	NICKEL UNF.TOT. MG/L	FIL.REAC MG/L
YYMMDD	LMT	/100ML	AS FE	FIELD		DEG.C	AS CAC03	AS HG	AS MN	AS NI	AS N
MAXIMUM		30000	1.6000	7.2		25.5	99.000	0.034	0.130	0.015	0.120
ARITH MEAN		3344	0.9173	7.0		10.2	69.091	0.020	0.056	0.005	0.052
GEOM MEAN		394	0.8927	7.0		7.4	67.786	0.017	0.046		
MINIMUM		30	0.7100	6.8		2.0	54.000	0.007	0.015	0.002	0.010
STD DEV (GEOM *)		8*	0.2524	0.1		7.8	15.109	0.010	0.036		
# SAMP IN STATISTICS		11	11	9		11	11	11	11	8	8
% SAMP (EXCLUDED)										27	27

*INTERIM TEST-NAME:		NN02FR	NN03FR	NNTKUR K'DAHL N TOTAL	PH	PP04FR	PPUT	RSP	RST	SS04UR	TCMF COLIFORM TOTAL MF CNT	
SAMPLE DATE	HOUR	FIL.REAC MG/L	FIL.REAC MG/L	UNF.REAC MG/L	PH	FIL.REAC MG/L	UNF.TOT. MG/L	RESIDUE PARTIC. MG/L	RESIDUE TOTAL MG/L	SULPHATE UNF.REAC MG/L		
YYMMDD	LMT	AS N	AS N	AS N		AS P	AS P			AS S04	/100ML	
830105	1150	11077	0.007	0.050	0.630	7.50	0.007	0.029	4.00	110.00	2.700	600AID
830207	1710	11081	0.015	0.010	1.000	7.10	0.010	0.050	13.00	240.00	8.000	55000C
830309	1145	11085	0.008		0.530	7.00	0.009	0.054	2.00	200.00	5.800	490000
830407	0945	11089	0.009	0.010<	0.600	6.80	0.015	0.076	5.00	210.00	9.200	10000
830502	1500	11093	0.008	0.010<	0.670	6.90	0.007	0.056	9.00	170.00	7.500	76000C
830606	1530	11097	0.011	0.010<	0.460	7.10	0.009	0.032	20.00	210.00	5.800	3700000
830704	1440	11002	0.005	0.010	0.650	7.40	0.034	0.073	10.00	150.00	9.500	40000AID
830808	1410	11006	0.009	0.010<	0.650	6.70	0.025	0.077	15.00	230.00	16.000	1500000
830912	1500	11010	0.006	0.010<	0.640	7.00	0.016	0.060	15.00	170.00	7.000	30000AID
831003	1500	11014	0.016	0.020	0.093	6.90	0.016	0.830	15.00	340.00	17.000	1100
831101	1430	11018	0.018	0.010<	0.940	6.90	0.033	0.110	9.00	340.00	16.000	18000
MAXIMUM		0.018	0.050	1.000	7.50	0.034	0.830	20.00	340.00	17.000	3700000	
ARITH MEAN		0.010	0.022	0.624	7.03	0.016	0.132	10.64	215.45	9.500	538245	
GEOM MEAN		0.009		0.552	7.02	0.014	0.073	8.92	204.98	8.391	45230	
MINIMUM		0.005	0.010	0.093	6.70	0.007	0.029	2.00	110.00	2.700	600	
STD DEV (GEOM *)		0.004		0.237	0.24	0.010	0.233	5.54	71.88	4.764	15*	
# SAMP IN STATISTICS		11	4	11	11	11	11	11	11	11	11	
% SAMP (EXCLUDED)			60									

(CONTD)

1983 WATER QUALITY DATA REGION 6

177

B.O.W./ SITE: WABIGOON RIVER
 SAMPLE POINT: AT MINNITAKI SIDEROAD
 STATION TYPE: RIVER

STATION ID: 19-0001-035-02

MAJOR BASIN: ARCTIC DRAINAGE NELSON RIVER
 MINOR BASIN: LAKE WINNIPEG EAST WINNIPEG RIVER
 TERM STREAM: ENGLISH RIVER

STORET CODE: 05
 001
 1890

LAT: 49 51 02.00 LONG: 093 05 22.99

U T M: 15 0493550.0 5521800.0 4 REGION: 06

DISTANCE: 235.280

*INTERIM TEST-NAME:		TCMFBK	TURB	ZNUT	
		COLIFORM			
		TOTAL MF		ZINC	
		BCKGRD		UNF.TOT.	
SAMPLE		CNT	TURB'ITY	MG/L	
DATE	HOUR				
YYMMDD	LMT	NUMBER	FTU	AS ZN	
830105	1150	11077	1900	11.00	0.0050
830207	1710	11081	400000	15.10	0.0120
830309	1145	11085	2300000	9.40	0.0050
830407	0945	11089	60000	13.00	0.0100
830502	1500	11093	500000	7.60	0.0060
830606	1530	11097	2100000	24.00	0.0060
830704	1440	11002	2000000	19.00	0.0050
830808	1410	11006	600000	15.00	0.0080
830912	1500	11010	160000	22.00	0.0050
831003	1500	11014	12000	7.30	0.0090
831101	1430	11018	700AID	15.00	0.0080
MAXIMUM		2300000	24.00	0.0120	
ARITH MEAN		739509	14.40	0.0072	
GEOM MEAN		129893	13.42	0.0068	
MINIMUM		700	7.30	0.0050	
STD DEV (GEOM *)		17*	5.54	0.0024	
# SAMP IN STATISTICS		11	11	11	
% SAMP (EXCLUDED)					

1983 WATER QUALITY DATA REGION 6

178

B.O.W./ SITE: WABIGOON RIVER
 SAMPLE POINT: HIGHWAY 609 NEAR QUIBELL
 STATION TYPE: RIVER FLOW GAUGE FED 05QD006

STATION ID: 19-0001-036-02

MAJOR BASIN: ARCTIC DRAINAGE NELSON RIVER
 MINOR BASIN: LAKE WINNIPEG EAST WINNIPEG RIVER
 TERM STREAM: ENGLISH RIVER

STORET CODE: 05
 001
 1890

LAT: 49 57 29.81 LONG: 093 24 01.63 U T M: 15 0471275.0 5533850.0 4 REGION: 06 DISTANCE: 199.875

*INTERIM TEST-NAME:		FWSADP	FGPROJ	ALKT	ASUT	BOD5	CLIDUR	COLAP	COND25	CUUT	DO
SAMPLE DATE	HOUR	SAMPLE	SAMPLE	PROJECT	ALK	ARSENIC	5 DAY	CHLORIDE	CONDUCT.	COPPER	DISOLVED
YYMMDD	LMT	NUMBER	DEPTH	SUB-PROJ	TOTAL	UNF.TOT.	TOT.DEM.	UNF.REAC	25C	UNF.TOT.	OXYGEN
			M	CODE	MG/L	MG/L	MG/L	MG/L	UMHO/CM	MG/L	MG/L
					AS CAC03	AS AS	AS O	AS CL-	AT 25 C	AS CU	AS O
830105	1110	11078	0.30	0101	41.0	0.0010<	0.50	1.400	96.0	0.0030	12.6
830207	1630	11082	0.30	0101	41.0	0.0010<	4.00	24.000	158.0	0.0040	12.8
830309	1100	11086	0.30	0101	42.0	0.0010	2.80	12.000	142.0	0.0030	12.8
830407	0845	11090	0.30	0101	46.0	0.0010<	3.20	18.000	170.0	0.0040	11.4
830502	1410	11094	0.30	0101	39.0	0.0010<	2.00	11.000	125.0	0.0010	10.4
830606	1135	11098	0.30	0101	43.0	0.0010<	1.30	12.000	143.0	0.0030	8.0
830704	1350	11003	0.30	0101	44.0	0.0010<	1.20	13.000	138.0	0.0020	7.2
830808	1430	11007	0.30	0101	45.0	0.0010<	1.40	11.000	152.0	0.0020	5.3
830912	1405	11011	0.30	0101	54.0	0.0010<	1.00	24.000	199.0	0.0030	6.3
831003	1410	11015	0.30	0101	56.0	0.0010	1.30	7.900	156.0	0.0030	9.7
831101	1330	11019	0.30	0101	69.0	0.0011	5.00	95.000	476.0	0.0050	8.0
MAXIMUM			0.30		69.0	0.0011	5.00	95.000	476.0	0.0050	12.8
ARITH MEAN			0.30		47.3	0.0010	2.15	20.845	177.7	0.0030	9.5
GEOM MEAN					46.6		1.76	13.383	162.1	0.0028	9.1
MINIMUM			0.30		39.0	0.0010	0.50	1.400	96.0	0.0010	5.3
STD DEV (GEOM *)					9.0		1.42	25.465	96.344	0.0011	2.7
# SAMP IN STATISTICS			11		11	3	11	11	11	11	11
% SAMP (EXCLUDED)						72					

*INTERIM TEST-NAME:		FCMF	FEUT	FWFLOW	FMPH	FWSTRC	FWTEMP	HARDT	HGUT	MNUT	NIUT
SAMPLE DATE	HOUR	FECAL	IRON	STREAM				HARDNESS	MERCURY	MANGANSE	NICKEL
YYMMDD	LMT	COLIFORM	UNF.TOT.	FLOW	PH	STREAM	WATER	TOTAL	UNF.TOT.	UNF.TOT.	UNF.TOT.
		HF	MG/L	M3	FIELD	COND.	TEMP	MG/L	UG/L	MG/L	MG/L
		/100ML	AS FE	/S			DEG.C	AS CAC03	AS HG	AS MN	AS NI
830105	1110	120	0.4600	35.200		8	2.0	39.000	0.007	0.012	0.002
830207	1630	36	0.4400	34.800	7.0	4	2.0	46.000	0.014	0.029	0.002<
830309	1100	400AID	0.3700	34.500	7.1	8	2.0	42.000	0.011	0.039	0.002
830407	0845	30AID	0.4400	38.100	7.0	8	6.0	51.000	0.012	0.031	0.002<
830502	1410	30AID	0.5800	51.100	7.2	3	4.5	41.000	0.014	0.028	0.002<
830606	1135	200	0.4900	52.500	6.9	8	13.5	49.000	0.010	0.028	0.002<
830704	1350	110	0.6600	41.100	6.9	0	20.0	47.000	0.047	0.036	0.002<
830808	1430	300C	0.5100	32.800	6.9		24.5	43.000	0.013	0.037	0.004
830912	1405	10<	0.4800	13.700	7.2	9	19.5	63.000	0.017	0.044	0.003
831003	1410	10<	0.5700	8.400	7.2	9	11.0	60.000	0.013	0.027	0.002<
831101	1330	140	1.0000	16.800	6.8	9	9.0	97.000	0.031	0.150	0.002<

(CONT'D)

1983 WATER QUALITY DATA REGION 6

179

B.O.W./ SITE: WABIGOON RIVER
 SAMPLE POINT: HIGHWAY 609 NEAR QUIBELL
 STATION TYPE: RIVER FLOW GAUGE FED 05QD006

STATION ID: 19-0001-036-02

MAJOR BASIN: ARCTIC DRAINAGE NELSON RIVER
 MINOR BASIN: LAKE WINNIPEG EAST WINNIPEG RIVER
 TERM STREAM: ENGLISH RIVER

STORET CODE: 05
 001
 1890

LAT: 49 57 29.81 LONG: 093 24 01.63 U T M: 15 0471275.0 5533850.0 4 REGION: 06 DISTANCE: 199.875

*INTERIM TEST-NAME:		FCMF FECAL COLIFORM	FEUT IRON UNF.TOT.	FWFLOW STREAM FLOW	FMPH PH	FWSTRC STREAM COND.	FWTEMP WATER TEMP	HARDT HARDNESS TOTAL	HGUT MERCURY UNF.TOT.	MNUT MANGANESE UNF.TOT.	NIUT NICKEL UNF.TOT.
SAMPLE DATE YYMMDD	TIME HOUR LMT	SAMPLE NUMBER	CNT /100ML	MG/L AS FE	M3 /S	FIELD	DEG.C	AS CAC03	UG/L AS HG	MG/L AS MN	MG/L AS NI
		MAXIMUM	400	1.0000	52.500	7.2	24.5	97.000	0.047	0.150	0.004
		ARITH MEAN	152	0.5455	32.636	7.0	10.4	52.545	0.017	0.042	0.003
		GEOM MEAN		0.5265	28.789	7.0	7.2	50.725	0.015	0.034	
		MINIMUM	30	0.3700	8.400	6.8	2.0	39.000	0.007	0.012	0.002
		STD DEV (GEOM *)		0.1704	14.313	0.1	8.1	16.579	0.012	0.037	
		# SAMP IN STATISTICS	9	11	11	10	11	11	11	11	4
		% SAMP (EXCLUDED)	18								63

*INTERIM TEST-NAME:		NNHTFR NH3-N TOTAL	NN02FR NO2-N TOTAL	NN03FR NO3-N TOTAL	NNTKUR K'DAHL N TOTAL	PH	PP04FR PO4 PHOSPHOR	PPUT UNF.TOT.	RSP RESIDUE PARTIC.	RST RESIDUE TOTAL	SS04UR SULPHATE UNF.REAC
SAMPLE DATE YYMMDD	TIME HOUR LMT	SAMPLE NUMBER	FIL.REAC MG/L AS N	FIL.REAC MG/L AS N	FIL.REAC MG/L AS N	UNF.REAC MG/L AS N	PH	FIL.REAC MG/L AS P	MG/L AS P	MG/L	MG/L AS S04
830105	1110	11078	0.020	0.005	0.030	0.440	7.50	0.010	0.026	3.00	85.00
830207	1630	11082	0.010<	0.008	0.010	0.450	6.90	0.005	0.029	7.00	220.00
830309	1100	11086	0.010<	0.004	0.010<	0.470	7.10	0.006	0.032	3.00	130.00
830407	0845	11090	0.010<	0.005	0.010<	0.500	6.90	0.005	0.038	4.00	140.00
830502	1410	11094	0.010<	0.005	0.010<	0.640	7.00	0.004	0.040	5.00	120.00
830606	1135	11098	0.010<	0.005	0.010<	0.560	7.00	0.009	0.041	6.00	140.00
830704	1350	11003	0.050	0.005	0.010	0.700	7.00	0.027	0.055	4.00	130.00
830808	1430	11007	0.040	0.004	0.010<	0.590	7.00	0.024	0.054	6.00	140.00
830912	1405	11011	0.150	0.007	0.020	0.750	7.20	0.029	0.066	7.00	180.00
831003	1410	11015	0.110	0.011	0.040	0.048	7.30	0.011	0.660	8.00	75.00
831101	1330	11019	0.020	0.018	0.010<	0.900	6.80	0.017	0.100	15.00	360.00
		MAXIMUM	0.150	0.018	0.040	0.900	7.50	0.029	0.660	15.00	360.00
		ARITH MEAN	0.065	0.007	0.022	0.550	7.06	0.013	0.104	6.18	156.36
		GEOM MEAN		0.006		0.466	7.06	0.011	0.057	5.55	142.86
		MINIMUM	0.020	0.004	0.010	0.048	6.80	0.004	0.026	3.00	75.00
		STD DEV (GEOM *)		0.004		0.219	0.20	0.009	0.186	3.37	78.30
		# SAMP IN STATISTICS	6	11	5	11	11	11	11	11	11
		% SAMP (EXCLUDED)	45		54						

(CONTD)

1983 WATER QUALITY DATA REGION 6

180

B.O.W./ SITE: WABIGOON RIVER
 SAMPLE POINT: HIGHWAY 609 NEAR QUIBELL
 STATION TYPE: RIVER FLOW GAUGE FED 05QD006

STATION ID: 19-0001-036-02

MAJOR BASIN: ARCTIC DRAINAGE NELSON RIVER
 MINOR BASIN: LAKE WINNIPEG EAST WINNIPEG RIVER
 TERM STREAM: ENGLISH RIVER

STORET CODE: 05
 001
 1890

LAT: 49 57 29.81 LONG: 093 24 01.63

U T M: 15 0471275.0 5533850.0 4 REGION: 06

DISTANCE: 199.875

*INTERIM TEST-NAME:		TCMF	TCMFBK	TURB	ZNUT	
		COLIFORM	COLIFORM			
		TOTAL	TOTAL MF		ZINC	
		MF	BCKGRD		UNF.TOT.	
SAMPLE		CNT	CNT	TURB'ITY	MG/L	
DATE	HOUR			FTU	AS ZN	
YYMMDD	LMT	SAMPLE				
		NUMBER	/100ML	/100ML		
830105	1110	11078	380	510	6.80	0.0040
830207	1630	11082	5000C	46000	6.40	0.0060
830309	1100	11086	150000>	1000000>	6.30	0.0060
830407	0845	11090	1900	7100	7.00	0.0060
830502	1410	11094	700C	50000	5.40	0.0030
830606	1135	11098	23000	108000	5.00	0.0020
830704	1350	11003	1600	11100	5.80	0.0030
830808	1430	11007	3000AID	260000	4.10	0.0080
830912	1405	11011	3500	8500	5.30	0.0030
831003	1410	11015	50AID	3500	8.30	0.0020
831101	1330	11019	1500	2000	9.10	0.0080
MAXIMUM		23000	260000	9.10	0.0080	
ARITH MEAN		4063	49671	6.32	0.0046	
GEOM MEAN				6.17	0.0041	
MINIMUM		50	510	4.10	0.0020	
STD DEV (GEOM *)				1.46	0.0022	
# SAMP IN STATISTICS		10	10	11	11	
% SAMP (EXCLUDED)		9	9			

1983 WATER QUALITY DATA REGION 6

181

B.O.W./ SITE: SNIB CREEK
 SAMPLE POINT: AT MOUTH ST. PAUL'S BAY
 STATION TYPE: RIVER

STATION ID: 19-0001-037-02

MAJOR BASIN: ARCTIC DRAINAGE NELSON RIVER
 MINOR BASIN: LAKE WINNIPEG EAST WINNIPEG RIVER
 TERM STREAM: ENGLISH RIVER

STORET CODE: 05
 001
 1890

LAT: 51 00 52.47 LONG: 093 53 06.91

U T M: 15 0437900.0 5651600.0 4

REGION: 06

DISTANCE: 295.790

*INTERIM		TEST-NAME:	FWSADP	FGPROJ	ACDT	ALKT	ASUT	BOD5	CCNAUR	CCNFUR	CDUT	CLIDUR
					ACIDITY	ALK	ARSENIC	5 DAY	CYANIDE	CYANIDE		
SAMPLE				PROJECT	TOTAL	TOTAL	UNF. TOT.	TOT. DEM.	UNF. REAC	UNF. REAC	UNF. TOT.	UNF. REAC
DATE	HR	SAMPLE	SAMPLE	SUB-PROJ	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
YYMMDD	LMT	NUMBER	DEPTH	CODE	AS CACO3	AS CACO3	AS AS	AS O	AS HCN	AS HCN	AS CD	AS CL-
830125	1125	11506	0.30	0101	6.000	35.0	0.0810	0.70	0.001<T	0.001<W	0.0005<	7.100
830329	0730	11513	0.30	0101	7.000	33.0	0.0740	1.00	0.001<W	0.001<W	0.0010	6.500
830607	1145	11527	0.30	0101	4.000	26.0	0.0360	1.20	0.001<W	0.001<W	0.0005<	4.400
830705	0930	11534	0.30	0101	5.000	29.0	0.0900	0.80	0.001<W	0.001<W	0.0005	4.700
830809	0945	11541	0.30	0101	8.00	30.0	0.1600	0.80	0.002<T	0.002<T	0.0005	6.000
830913	1010	11548	0.30	0101	8.000	34.0	0.0640	0.90	0.001<W	0.001<W	0.0005<	4.700
831004	0930	11555	0.30	0101	8.000	34.0	0.0680	0.90	0.001		0.0008	6.300
MAXIMUM			0.30		8.00	35.0	0.1600	1.20	0.002	0.002	0.0010	7.100
ARITH MEAN			0.30		6.57	31.6	0.0819	0.90	0.001<A	0.001<A	0.0007	5.671
GEOM MEAN					6.38	31.4	0.0751	0.89	0.001<A	0.001<A		5.585
MINIMUM			0.30		4.000	26.0	0.0360	0.70	0.001	0.001	0.0005	4.400
STD DEV (GEOM *)					1.62	3.3	0.0384	0.16	0.000<A	0.000<A		1.059
# SAMP IN STATISTICS			7		7	7	7	7	7	6	4	7
% SAMP (EXCLUDED)											42	
*INTERIM		TEST-NAME:	COLAP	COND25	COUT	CUUT	DO	FEUT	FVPH	FWSTRC	FWTEMP	HARDT
				CONDUCT.	COBALT	COPPER	DISOLVED	IRON				HARDNESS
				25C	UNF. TOT.	UNF. TOT.	OXYGEN	UNF. TOT.				TOTAL
SAMPLE		COLOUR		UMHO/CM	MG/L	MG/L	MG/L	MG/L				MG/L
DATE	HR	APPARENT		AT 25 C	AS CO	AS CU	AS O	AS FE	PH	STREAM	WATER	AS CACO3
YYMMDD	LMT	HZU							FIELD	COND.	TEMP	
											DEG.C	
830125	1125	11506		146.0	0.0020<	0.0210	12.8	0.3800	7.2	4	0.5	54.000
830329	0730	11513	90.000	137.0	0.0020	0.0200	10.3	0.2900	6.7	4	1.0	51.000
830607	1145	11527	81.000	98.0	0.0020<	0.0120	8.4	0.1700	7.2	8	11.5	38.000
830705	0930	11534	92.000	102.0	0.0020<	0.0120	6.8	0.1800	7.3	8	16.0	41.000
830809	0945	11541	77.000	114.0	0.0030	0.0080	3.5	0.2300	6.8		20.0	44.000
830913	1010	11548	73.000	106.0	0.0020<	0.0060	7.3	0.1500	6.9	8	12.5	44.000
831004	0930	11555	44.000	124.0	0.0020<	0.0080	5.5	0.1700	6.4	8	7.0	47.000
MAXIMUM			92.000	146.0	0.0030	0.0210	12.8	0.3800	7.3		20.0	54.000
ARITH MEAN			76.167	118.1	0.0025	0.0124	7.8	0.2243	6.9		9.8	45.571
GEOM MEAN			74.125	117.0		0.0113	7.3	0.2128	6.9		5.5	45.283
MINIMUM			44.000	98.0	0.0020	0.0060	3.5	0.1500	6.4		0.5	38.000
STD DEV (GEOM *)			17.383	18.2		0.0059	3.1	0.0836	0.3		7.4	5.563
# SAMP IN STATISTICS			6	7		7	7	7	7		7	7
% SAMP (EXCLUDED)					71							

(CONTD)

1983 WATER QUALITY DATA REGION 6

182

B.O.W./ SITE: SNIB CREEK
 SAMPLE POINT: AT MOUTH ST. PAUL'S BAY
 STATION TYPE: RIVER

STATION ID: 19-0001-037-02

MAJOR BASIN: ARCTIC DRAINAGE NELSON RIVER
 MINOR BASIN: LAKE WINNIPEG EAST WINNIPEG RIVER
 TERM STREAM: ENGLISH RIVER

STORET CODE: 05
 001
 1890

LAT: 51 00 52.47 LONG: 093 53 06.91

U T M: 15 0437900.0 5651600.0 4

REGION: 06

DISTANCE: 295.790

*=INTERIM TEST-NAME:		HGUT	MNUT	NIUT	NNHTFR NH3-N	NN02FR	NN03FR	NNTKUR K'DAHL N	PBUT	PH	PP04FR
		MERCURY UNF.TOT. UG/L	MANGANESE UNF.TOT. MG/L	NICKEL UNF.TOT. MG/L	TOTAL FIL.REAC MG/L	NO2-N FIL.REAC MG/L	NO3-N FIL.REAC MG/L	TOTAL UNF.REAC MG/L	LEAD UNF.TOT. MG/L		PO4 FIL.REAC MG/L
SAMPLE DATE YYMMDD	HOUR LMT	SAMPLE NUMBER AS HG	AS MN	AS NI	AS N	AS N	AS N	AS N	AS PB	PH	AS P
830125	1125	11506	0.050<	0.039	0.012	0.020	0.004	0.060	0.790	0.003 <	0.008
830329	0730	11513	0.050<	0.033	0.014	0.010<	0.004	0.120	0.690	0.008	0.010
830607	1145	11527		0.015	0.007	0.020	0.004	0.010<	0.550	0.0030<	0.004
830705	0930	11534		0.013	0.008	0.040	0.003	0.010<	0.660	0.003 <	0.011
830809	0945	11541	0.050<	0.037	0.0090	0.120	0.004	0.010	0.800	0.003	0.008
830913	1010	11548	0.050<	0.022	0.007	0.040	0.003	0.010<	0.680	0.003 <	0.011
831004	0930	11555	0.050<	0.033	0.007	0.040	0.003	0.020	0.690	0.003 <	0.013
MAXIMUM				0.039	0.014	0.120	0.004	0.120	0.800	0.008	0.013
ARITH MEAN				0.027	0.009	0.047	0.004	0.052	0.694	0.005	0.009
GEOM MEAN				0.025	0.009		0.004		0.690		0.009
MINIMUM				0.013	0.007	0.020	0.003	0.010	0.550	0.003	0.004
STD DEV (GEOM *)				0.011	0.003		0.001		0.084		0.003
# SAMP IN STATISTICS				7	7	6	7	4	2	7	7
% SAMP (EXCLUDED)						14		42	71		
*=INTERIM TEST-NAME:		PPUT PHOSPHOR	RSP	RST	SI03UR SILICATE	SS04UR SULPHATE	TURB	ZNUT ZINC			
SAMPLE DATE YYMMDD	HOUR LMT	SAMPLE NUMBER AS P	RESIDUE PARTIC. MG/L	RESIDUE TOTAL MG/L	UNF.REAC MG/L AS SI	UNF.REAC MG/L AS S04	TURB'ITY FTU	UNF.TOT. MG/L AS ZN			
830125	1125	11506	0.039	8.00	140.00	2.100	18.000	1.70	0.0080		
830329	0730	11513	0.031	3.00	140.00	2.100	17.000	1.30	0.0090		
830607	1145	11527	0.026	4.00	100.00	1.000	10.000	0.90	0.0040		
830705	0930	11534	0.024	2.00	110.00	1.400	12.000	0.65	0.0030		
830809	0945	11541	0.032	1.00	120.00	1.500	11.000	0.70	0.0040		
830913	1010	11548	0.031	1.00	130.00	1.600	7.800	0.90	0.0010		
831004	0930	11555	0.035	1.00	130.00	1.400	11.000	1.70	0.002		
MAXIMUM			0.039	8.00	140.00	2.100	18.000	1.70	0.0090		
ARITH MEAN			0.031	2.86	124.29	1.586	12.400	1.12	0.004		
GEOM MEAN			0.031	2.12	123.46	1.542	11.943	1.05	0.004		
MINIMUM			0.024	1.00	100.00	1.000	7.800	0.65	0.0010		
STD DEV (GEOM *)			0.005	2.54	15.12	0.398	3.731	0.45	0.003		
# SAMP IN STATISTICS			7	7	7	7	7	7	7		
% SAMP (EXCLUDED)											

1983 WATER QUALITY DATA REGION 6

183

B.O.W./ SITE: SEVERN RIVER
 SAMPLE POINT: SEVERN RIVER AT OUTLET OF MUSKRAT
 STATION TYPE: RIVER FLOW GAUGE FED 04CA002

DAM LAKE
 MAJOR BASIN: GREAT LAKES
 MINOR BASIN: JAMES BAY SHORE
 TERM STREAM: SEVERN RIVER

STATION ID: 19-0008-001-02

STORET CODE: 04
 001
 0008

LAT: 54 23 25.82 LONG: 091 29 37.92

U T M: 15 0597800.0 6027800.0 4

REGION: 06

DISTANCE: 73.600

*=INTERIM TEST-NAME:		FWSADP	FGPROJ	ALKT	ALUT	ASUT	CAUR	CDUT	CLIDUR	COLAP	COND25
				ALK	ALUMINUM	ARSENIC	CALCIUM	CADMIUM	CHLORIDE	COLOUR	CONDUCT.
SAMPLE		SAMPLE	PROJECT	TOTAL	UNF.TOT.	UNF.TOT.	UNF.REAC	UNF.TOT.	UNF.REAC	APPARENT	25C
DATE	HOUR	NUMBER	SUB-PROJ	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	UMHO/CM	
YYMMDD	LMT		CODE	AS CACO3	AS AL	AS AS	AS CA	AS CD	AS CL-	HZU	AT 25 C
830519		16	0101	29.0	0.080	0.0010	9.800	0.0005<	0.100	79.000	60.0
		MAXIMUM		29.0	0.080	0.0010	9.800		0.100	79.000	60.0
		ARITH MEAN		29.0	0.080	0.0010	9.800		0.100	79.000	60.0
		GEOM MEAN									
		MINIMUM		29.0	0.080	0.0010	9.800		0.100	79.000	60.0
		STD DEV (GEOM *)									
		# SAMP IN STATISTICS	1	1	1	1	1	1	1	1	1
		% SAMP (EXCLUDED)									
*=INTERIM TEST-NAME:		COUT	CRUT	CUUT	FEUT	HARDT	KKUR	MGUR	MNUT	NAUR	NIUT
		COBALT	CHROMIUM	COPPER	IRON	HARDNESS	POTASSIM	MAGNESIM	MANGANSE	SODIUM	NICKEL
SAMPLE		UNF.TOT.	UNF.TOT.	UNF.TOT.	UNF.TOT.	TOTAL	UNF.REAC	FIL.REAC	UNF.TOT.	UNF.REAC	UNF.TOT.
DATE	HOUR	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
YYMMDD	LMT	AS CO	AS CR	AS CU	AS FE	AS CACO3	AS K	AS MG	AS MN	AS NA	AS NI
830519		16	0.0020<	0.0030	0.0030	0.3200	30.000	0.41	2.000	0.007	0.690
		MAXIMUM		0.0030	0.0030	0.3200	30.000	0.41	2.000	0.007	0.690
		ARITH MEAN		0.0030	0.0030	0.3200	30.000	0.41	2.000	0.007	0.690
		GEOM MEAN									
		MINIMUM		0.0030	0.0030	0.3200	30.000	0.41	2.000	0.007	0.690
		STD DEV (GEOM *)									
		# SAMP IN STATISTICS	1	1	1	1	1	1	1	1	1
		% SAMP (EXCLUDED)									
*=INTERIM TEST-NAME:		NNHTFR	NNO2FR	NNO3FR	NNTKUR	PBUT	PH	PP04FR	PPUT	RSP	RST
		NH3-N	NO2-N	NO3-N	K*DAHL N	LEAD		P04	PHOSPHOR		
SAMPLE		FIL.REAC	FIL.REAC	FIL.REAC	UNF.REAC	UNF.TOT.		FIL.REAC	UNF.TOT.	RESIDUE	RESIDUE
DATE	HOUR	MG/L	MG/L	MG/L	MG/L	MG/L		MG/L	MG/L	PARTIC.	TOTAL
YYMMDD	LMT	AS N	AS N	AS N	AS N	AS PB	PH	AS P	AS P	MG/L	MG/L
830519		16	0.010<	0.003	0.010<	0.380	6.80	0.002	0.016	2.00	70.00
		MAXIMUM		0.003		0.380	6.80	0.002	0.016	2.00	70.00
		ARITH MEAN		0.003		0.380	6.80	0.002	0.016	2.00	70.00
		GEOM MEAN									
		MINIMUM		0.003		0.380	6.80	0.002	0.016	2.00	70.00
		STD DEV (GEOM *)									
		# SAMP IN STATISTICS	1		1		1	1	1	1	1
		% SAMP (EXCLUDED)									

(C O N T D)

1983 WATER QUALITY DATA REGION 6

184

B.O.W./ SITE: SEVERN RIVER

SAMPLE POINT: SEVERN RIVER AT OUTLET OF MUSKRAT

STATION TYPE: RIVER FLOW GAUGE FED 04CA002

DAM LAKE

MAJOR BASIN: GREAT LAKES

MINOR BASIN: JAMES BAY SHORE

TERM STREAM: SEVERN RIVER

STATION ID: 19-0008-001-02

STORET CODE: 04

001

0008

LAT: 54 23 25.82 LONG: 091 29 37.92

U T M: 15 0597800.0 6027800.0 4

REGION: 06

DISTANCE: 73.600

*INTERIM TEST-NAME:		SIO3UR	SSO4UR	TURB	ZNUT
		SILICATE	SULPHATE		ZINC
SAMPLE		UNF.REAC	UNF.REAC		UNF.TOT.
DATE	HOUR	MG/L	MG/L	TURB'ITY	MG/L
YYMMDD	LMT	AS SI	AS S04	FTU	AS ZN
830519	16	0.700	1.000<	1.70	0.0010
	MAXIMUM	0.700		1.70	0.0010
	ARITH MEAN	0.700		1.70	0.0010
	GEOM MEAN				
	MINIMUM	0.700		1.70	0.0010
	STD DEV (GEOM *)				
	# SAMP IN STATISTICS	1		1	1
	% SAMP (EXCLUDED)				

1983 WATER QUALITY DATA REGION 6

185

B.O.W./ SITE: FAWN RIVER
 SAMPLE POINT: FAWN RIVER BELOW BIG TROUT LAKE
 STATION TYPE: RIVER FLOW GAUGE FED 04CE002

STATION ID: 19-0008-002-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: JAMES BAY SHORE
 TERM STREAM: SEVERN RIVER

STORET CODE: 04
 001
 0008

LAT: 53 45 40.74 LONG: 089 33 49.42 U T M: 16 0331000.0 5959800.0 4 REGION: 06 DISTANCE: 43.680

*INTERIM TEST-NAME:		FWSADP	FGPROJ	ALKT	ALUT	ASUT	CAUR	CDUT	CLIDUR	COLAP	COND25
				ALK	ALUMINUM	ARSENIC	CALCIUM	CADMIUM	CHLORIDE	COLOUR	CONDUCT.
SAMPLE DATE	HR	SAMPLE	PROJECT	TOTAL	UNF.TOT.	UNF.TOT.	UNF.REAC	UNF.TOT.	UNF.REAC	COLOUR	25C
YYMMDD	LMT	NUMBER	SUB-PROJ	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	APPARENT	UMHO/CM
			CODE	AS CAC03	AS AL	AS AS	AS CA	AS CD	AS CL-	HZU	AT 25 C
830519		20	0101	50.0	0.020	0.0010	16.000	0.0005<	0.600	15.000	103.0
830928		34	0101	53.0	0.010<	0.0010<	18.000	0.0011	0.300	18.000	111.0
MAXIMUM		0.30		53.0	0.020	0.0010	18.000	0.0011	0.600	18.000	111.0
ARITH MEAN		0.30		51.5	0.020	0.0010	17.000	0.0011	0.450	16.500	107.0
GEOM MEAN				51.5			16.971		0.424	16.432	106.9
MINIMUM		0.30		50.0	0.020	0.0010	16.000	0.0011	0.300	15.000	103.0
STD DEV (GEOM *)				2.1			1.414		0.212	2.121	5.7
# SAMP IN STATISTICS		2		2	1	1	2	1	2	2	2
% SAMP (EXCLUDED)					50	50		50			
*INTERIM TEST-NAME:		COUT	CRUT	CUUT	FEUT	HARDT	HGUT	KKUR	MGUR	MNUT	NAUR
		COBALT	CHROMIUM	COPPER	IRON	HARDNESS	MERCURY	POTASSIM	MAGNESIM	MANGANSE	SODIUM
SAMPLE DATE	HR	UNF.TOT.	UNF.TOT.	UNF.TOT.	UNF.TOT.	TOTAL	UNF.TOT.	UNF.REAC	FIL.REAC	UNF.TOT.	UNF.REAC
YYMMDD	LMT	MG/L	MG/L	MG/L	MG/L	MG/L	UG/L	MG/L	MG/L	MG/L	MG/L
		AS CO	AS CR	AS CU	AS FE	AS CAC03	AS HG	AS K	AS MG	AS MN	AS NA
830519		20	0.0020<	0.0020<	0.0020	0.0380	53.000	0.014	0.43	2.900	0.440
830928		34	0.0020<	0.0020<	0.0030	0.0350	58.000	0.055	0.23	3.100	0.900
MAXIMUM				0.0030	0.0380	58.000	0.055	0.43	3.100	0.019	0.900
ARITH MEAN				0.0025	0.0365	55.500	0.034	0.33	3.000	0.014	0.670
GEOM MEAN				0.0024	0.0365	55.444	0.028	0.31	2.998	0.013	0.629
MINIMUM				0.0020	0.0350	53.000	0.014	0.23	2.900	0.009	0.440
STD DEV (GEOM *)				0.0007	0.0021	3.536	0.029	0.14	0.141	0.007	0.325
# SAMP IN STATISTICS				2	2	2	2	2	2	2	2
% SAMP (EXCLUDED)											

(CONTD)

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1983 WATER QUALITY DATA REGION 6

186

B.O.W./ SITE: FAWN RIVER
 SAMPLE POINT: FAWN RIVER BELOW BIG TROUT LAKE
 STATION TYPE: RIVER FLOW GAUGE FED 04CE002

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: JAMES BAY SHORE
 TERM STREAM: SEVERN RIVER

STATION ID: 19-0008-002-02

STORET CODE: 04
 001
 0008

LAT: 53 45 40.74 LONG: 089 33 49.42

U T M: 16 0331000.0 5959800.0 4

REGION: 06

DISTANCE: 43.680

*INTERIM TEST-NAME:		NIUT	NNHTFR NH3-N TOTAL	NN02FR NO2-N FIL.REAC	NN03FR NO3-N FIL.REAC	NNTKUR K'DAHL N TOTAL	PBUT LEAD UNF.TOT.	PH	PP04FR P04 FIL.REAC	PPUT PHOSPHOR UNF.TOT.	RSP RESIDUE PARTIC.	
SAMPLE DATE YYMMDD	HOUR LMT	SAMPLE NUMBER	UNF.TOT. MG/L AS NI	FIL.REAC MG/L AS N	FIL.REAC MG/L AS N	FIL.REAC MG/L AS N	UNF.REAC MG/L AS N	UNF.TOT. MG/L AS PB	PH	AS P	AS P	MG/L
830519		20	0.002<	0.030	0.002	0.010	0.320	0.003<	7.80	0.002	0.006	2.00
830928		34	0.002<	0.020	0.001<	0.010	0.360	0.003<	7.80	0.002	0.011	2.00
MAXIMUM				0.030	0.002	0.010	0.360		7.80	0.002	0.011	2.00
ARITH MEAN				0.025	0.002	0.010	0.340		7.80	0.002	0.008	2.00
GEOM MEAN				0.024		0.010	0.339		7.80	0.002	0.008	2.00
MINIMUM				0.020	0.002	0.010	0.320		7.80	0.002	0.006	2.00
STD DEV (GEOM *)				0.007		0.000	0.028		0.00	0.000	0.004	0.00
# SAMP IN STATISTICS				2	1	2	2		2	2	2	2
% SAMP (EXCLUDED)					50							
*INTERIM TEST-NAME:		RST	SIO3UR SILICATE UNF.REAC	SS04UR SULPHATE UNF.REAC	TURB	ZNUT ZINC UNF.TOT.						
SAMPLE DATE YYMMDD	HOUR LMT	SAMPLE NUMBER	RESIDUE TOTAL MG/L	MG/L AS SI	MG/L AS S04	TURB'ITY FTU	MG/L AS ZN					
830519		20	85.00	0.400	1.200	0.30	0.0130					
830928		34	95.00	1.200	1.400	0.55	0.0050					
MAXIMUM			95.00	1.200	1.400	0.55	0.0130					
ARITH MEAN			90.00	0.800	1.300	0.42	0.0090					
GEOM MEAN			89.86	0.693	1.296	0.41	0.0081					
MINIMUM			85.00	0.400	1.200	0.30	0.0050					
STD DEV (GEOM *)			7.07	0.566	0.141	0.18	0.0057					
# SAMP IN STATISTICS			2	2	2	2	2					
% SAMP (EXCLUDED)												

11

1983 WATER QUALITY DATA REGION 6

187

B.O.W./ SITE: ROSEBERRY RIVER
 SAMPLE POINT: ROSEBERRY RIVER ABOVE ROSEBERRY
 STATION TYPE: RIVER FLOW GAUGE FED 04CA003

LAKES
 MAJOR BASIN: GREAT LAKES
 MINOR BASIN: JAMES BAY SHORE
 TERM STREAM: SEVERN RIVER

STATION ID: 19-0008-003-02

STORET CODE: 04
 001
 0008

LAT: 52 43 57.93 LONG: 092 36 00.56

U T M: 15 0527000.0 5842400.0 4

REGION: 06

DISTANCE: 68.160

*INTERIM TEST-NAME:		FWSADP	FGPROJ	ALKT	ALUT	ASUT	CAUR	CDUT	CLIDUR	COLAP	COND25	
				ALK	ALUMINUM	ARSENIC	CALCIUM	CADMIUM	CHLORIDE	COLOUR	CONDUCT.	
SAMPLE DATE	HHMM	SAMPLE DEPTH	PROJECT SUB-PROJ	TOTAL MG/L	UNF. TOT. MG/L	UNF. TOT. MG/L	UNF. REAC MG/L	UNF. TOT. MG/L	UNF. REAC MG/L	APPARENT HZU	25C UMHO/CM AT 25 C	
YYMMDD	LMT	NUMBER	CODE	AS CAC03	AS AL	AS AS	AS CA	AS CD	AS CL-			
830519		11	0101	25.0	0.250	0.0010	8.400	0.0005<	0.200	88.000	58.0	
830923		25	0101	37.0	1.000	0.0010<	11.000	0.0006	0.300	81.000	81.0	
MAXIMUM		0.30		37.0	1.000	0.0010	11.000	0.0006	0.300	88.000	81.0	
ARITH MEAN		0.30		31.0	0.625	0.0010	9.700	0.0006	0.250	84.500	69.5	
GEOM MEAN				30.4	0.500		9.612		0.245	84.427	68.5	
MINIMUM		0.30		25.0	0.250	0.0010	8.400	0.0006	0.200	81.000	58.0	
STD DEV (GEOM *)				8.5	0.530		1.838		0.071	4.950	16.3	
# SAMP IN STATISTICS		2		2	2	1	2	1	2	2	2	
% SAMP (EXCLUDED)						50		50				
*INTERIM TEST-NAME:		COBT	CRUT	CUUT	FEUT	HARDT	HGUT	KKUR	MGUR	MNUT	NAUR	
		COBALT	CHROMIUM	COPPER	IRON	HARDNESS	MERCURY	POTASSIM	MAGNESIM	MANGANESE	SODIUM	
SAMPLE DATE	HHMM	UNF. TOT. MG/L	UNF. TOT. MG/L	UNF. TOT. MG/L	UNF. TOT. MG/L	TOTAL MG/L	UNF. TOT. UG/L	UNF. REAC MG/L	FIL. REAC MG/L	UNF. TOT. MG/L	UNF. REAC MG/L	
YYMMDD	LMT	AS CO	AS CR	AS CU	AS FE	AS CAC03	AS HG	AS K	AS MG	AS MN	AS NA	
830519		11	0.0020<	0.0040	0.0020	0.4200	27.000	0.053	0.72	2.100	0.010	1.100
830923		25	0.0020<	0.0020	0.0020	0.9500	40.000	0.041	0.87	3.200	0.023	1.500
MAXIMUM			0.0040	0.0020	0.9500	40.000	0.053	0.87	3.200	0.023	1.500	
ARITH MEAN			0.0030	0.0020	0.6850	33.500	0.047	0.79	2.650	0.016	1.300	
GEOM MEAN			0.0028	0.0020	0.6317	32.863	0.047	0.79	2.592	0.015	1.285	
MINIMUM			0.0020	0.0020	0.4200	27.000	0.041	0.72	2.100	0.010	1.100	
STD DEV (GEOM *)			0.0014	0.0000	0.3748	9.192	0.008	0.11	0.778	0.009	0.283	
# SAMP IN STATISTICS			2	2	2	2	2	2	2	2	2	
% SAMP (EXCLUDED)												

(CONTD)

1983 WATER QUALITY DATA REGION 6

188

B.O.W./ SITE: ROSEBERRY RIVER
 SAMPLE POINT: ROSEBERRY RIVER ABOVE ROSEBERRY
 STATION TYPE: RIVER FLOW GAUGE FED 04CA003

LAKES
 MAJOR BASIN: GREAT LAKES
 MINOR BASIN: JAMES BAY SHORE
 TERM STREAM: SEVERN RIVER

STATION ID: 19-0008-003-02

STORET CODE: 04
 001
 0008

LAT: 52 43 57.93 LONG: 092 36 00.56 U T M: 15 0527000.0 5842400.0 4 REGION: 06 DISTANCE: 68.160

*=INTERIM TEST-NAME:		NIUT	NNHTFR NH3-N TOTAL	NN02FR NO2-N FIL.REAC	NN03FR NO3-N FIL.REAC	NNTKUR K'DAHL N TOTAL	PBUT LEAD UNF.TOT.	PH	PP04FR PO4 FIL.REAC	PPUT PHOSPHOR UNF.TOT.	RSP RESIDUE PARTIC.	
SAMPLE DATE YYMMDD	HOUR LMT	SAMPLE NUMBER	MG/L AS NI	MG/L AS N	MG/L AS N	MG/L AS N	MG/L AS PB	PH	MG/L AS P	MG/L AS P	MG/L	
830519		11	0.002<	0.040	0.003	0.010<	0.510	0.003<	6.80	0.003	0.024	4.00
830923		25	0.003	0.040	0.006	0.010<	0.580	0.003<	7.40	0.013	0.041	5.00
		MAXIMUM	0.003	0.040	0.006		0.580		7.40	0.013	0.041	5.00
		ARITH MEAN	0.003	0.040	0.004		0.545		7.10	0.008	0.032	4.50
		GEOM MEAN		0.040	0.004		0.544		7.09	0.006	0.031	4.47
		MINIMUM	0.003	0.040	0.003		0.510		6.80	0.003	0.024	4.00
		STD DEV (GEOM *)		0.000	0.002		0.049		0.42	0.007	0.012	0.71
		# SAMP IN STATISTICS	1	2	2	2		2	2	2	2	
		% SAMP (EXCLUDED)	50									

*=INTERIM TEST-NAME:		RST	SI03UR SILICATE UNF.REAC	SS04UR SULPHATE UNF.REAC	TURB TURB'ITY FTU	ZNUT ZINC UNF.TOT.
SAMPLE DATE YYMMDD	HOUR LMT	SAMPLE NUMBER	MG/L AS SI	MG/L AS S04		MG/L AS ZN
830519		11	80.00	1.400	3.00	0.0020
830923		25	110.00	1.400	8.70	0.0020
		MAXIMUM	110.00	1.400	8.70	0.0020
		ARITH MEAN	95.00	1.400	5.85	0.0020
		GEOM MEAN	93.81	1.400	5.11	0.0020
		MINIMUM	80.00	1.400	3.00	0.0020
		STD DEV (GEOM *)	21.21	0.000	4.03	0.0000
		# SAMP IN STATISTICS	2	2	2	2
		% SAMP (EXCLUDED)				

1983 WATER QUALITY DATA REGION 6

189

B.O.W./ SITE: SEVERN RIVER
 SAMPLE POINT: SEVERN RIVER BELOW OUTLET OF
 STATION TYPE: RIVER FLOW GAUGE FED 04CA004

DEER LAKE
 MAJOR BASIN: GREAT LAKES
 MINOR BASIN: JAMES BAY SHORE
 TERM STREAM: SEVERN RIVER

STATION ID: 19-0008-004-02

STORET CODE: 04
 001
 0008

LAT: 52 43 01.28 LONG: 094 09 16.96 U T M: 15 0422000.0 5841200.0 4 REGION: 06 DISTANCE: 119.680

*=INTERIM TEST-NAME:		FWSADP	FGPROJ	ALKT	ALUT	ASUT	CAUR	CDUT	CLIDUR	COLAP	COND25	
				ALK	ALUMINUM	ARSENIC	CALCIUM	CADMIUM	CHLORIDE		CONDUCT.	
SAMPLE DATE	YMMDD LMT	SAMPLE NUMBER	SAMPLE DEPTH M	PROJECT SUB-PROJ CODE	TOTAL MG/L AS CAC03	UNF.TOT. MG/L AS AL	UNF.TOT. MG/L AS AS	UNF.REAC MG/L AS CA	UNF.TOT. MG/L AS CD	UNF.REAC MG/L AS CL-	COLOUR APPARENT HZU	UMHO/CM AT 25 C
830519		12	0.30	0101	14.0	0.020	0.0010<	4.400	0.0005<	0.200	34.000	34.0
830923		26	0.30	0101	13.0	0.060	0.0010<	4.100	0.0005<	0.200	30.000	34.0
MAXIMUM			0.30		14.0	0.060		4.400		0.200	34.000	34.0
ARITH MEAN			0.30		13.5	0.040		4.250		0.200	32.000	34.0
GEOM MEAN					13.5	0.035		4.247		0.200	31.937	34.0
MINIMUM			0.30		13.0	0.020		4.100		0.200	30.000	34.0
STD DEV (GEOM *)					0.7	0.028		0.212		0.000	2.828	0.0
# SAMP IN STATISTICS			2		2	2		2		2	2	2
% SAMP (EXCLUDED)												
*=INTERIM TEST-NAME:		COBT	CRUT	CUUT	FEUT	HARDT	HGUT	KKUR	MGUR	MNUT	NAUR	
		COBALT	CHROMIUM	COPPER	IRON	HARDNESS	MERCURY	POTASSIM	MAGNESIM	MANGANSE	SODIUM	
SAMPLE DATE	YMMDD LMT	UNF.TOT. MG/L AS CO	UNF.TOT. MG/L AS CR	UNF.TOT. MG/L AS CU	UNF.TOT. MG/L AS FE	TOTAL MG/L AS CAC03	UNF.TOT. UG/L AS HG	UNF.REAC MG/L AS K	FIL.REAC MG/L AS MG	UNF.TOT. MG/L AS MN	UNF.REAC MG/L AS NA	
830519		12	0.0020<	0.0050	0.0010	0.1400	14.000	0.110	0.48	1.200	0.004	0.930
830923		26	0.0020<	0.0020	0.0140	0.0790	15.000	0.134	0.43	1.300	0.006	0.940
MAXIMUM				0.0050	0.0140	0.1400	15.000	0.134	0.48	1.300	0.006	0.940
ARITH MEAN				0.0035	0.0075	0.1095	14.500	0.122	0.45	1.250	0.005	0.935
GEOM MEAN				0.0032	0.0037	0.1052	14.491	0.121	0.45	1.249	0.005	0.935
MINIMUM				0.0020	0.0010	0.0790	14.000	0.110	0.43	1.200	0.004	0.930
STD DEV (GEOM *)				0.0021	0.0092	0.0431	0.707	0.017	0.04	0.071	0.001	0.007
# SAMP IN STATISTICS				2	2	2	2	2	2	2	2	2
% SAMP (EXCLUDED)												

(CONTD)

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1983 WATER QUALITY DATA REGION 6

190

B.O.W./ SITE: SEVERN RIVER
 SAMPLE POINT: SEVERN RIVER BELOW OUTLET OF
 STATION TYPE: RIVER FLOW GAUGE FED 04CA004

DEER LAKE
 MAJOR BASIN: GREAT LAKES
 MINOR BASIN: JAMES BAY SHORE
 TERM STREAM: SEVERN RIVER

STATION ID: 19-0008-004-02

STORET CODE: 04
 001
 0008

LAT: 52 43 01.28 LONG: 094 09 16.96 U T M: 15 0422000.0 5841200.0 4 REGION: 06 DISTANCE: 119.680

*INTERIM TEST-NAME:		NIUT	NNHTFR NH3-N	NNO2FR	NN03FR	NNTKUR K'DAHL N	PBUT	PH	PP04FR	PPUT	RSP
		NICKEL	TOTAL	NO2-N	NO3-N	TOTAL	LEAD		P04	PHOSPHOR	
SAMPLE DATE	HOUR	UNF.TOT. MG/L	FIL.REAC MG/L	FIL.REAC MG/L	FIL.REAC MG/L	UNF.REAC MG/L	UNF.TOT. MG/L		FIL.REAC MG/L	UNF.TOT. MG/L	RESIDUE PARTIC.
YYMMDD	LMT	AS NI	AS N	AS N	AS N	AS N	AS PB	PH	AS P	AS P	MG/L
830519	12	0.002<	0.020	0.001	0.030	0.340	0.003<	6.60	0.002	0.012	1.00
830923	26	0.002<	0.010	0.001	0.010<	0.360	0.003<	7.10	0.002	0.013	2.00
MAXIMUM			0.020	0.001	0.030	0.360		7.10	0.002	0.013	2.00
ARITH MEAN			0.015	0.001	0.030	0.350		6.85	0.002	0.012	1.50
GEOM MEAN			0.014	0.001		0.350		6.85	0.002	0.012	1.41
MINIMUM			0.010	0.001	0.030	0.340		6.60	0.002	0.012	1.00
STD DEV (GEOM *)			0.007	0.000		0.014		0.35	0.000	0.001	0.71
# SAMP IN STATISTICS			2	2	1	2		2	2	2	2
% SAMP (EXCLUDED)					50						
*INTERIM TEST-NAME:		RST	SIO3UR SILICATE	SS04UR SULPHATE	TURB	ZNUT ZINC					
		RESIDUE	UNF.REAC	UNF.REAC	TURB'ITY	UNF.TOT.					
SAMPLE DATE	HOUR	TOTAL	MG/L	MG/L	FTU	MG/L					
YYMMDD	LMT	MG/L	AS SI	AS SO4		AS ZN					
830519	12	50.00	0.600	2.200	3.60	0.0010					
830923	26	55.00	0.500	2.400	0.70	0.0010					
MAXIMUM		55.00	0.600	2.400	3.60	0.0010					
ARITH MEAN		52.50	0.550	2.300	2.15	0.0010					
GEOM MEAN		52.44	0.548	2.298	1.59	0.0010					
MINIMUM		50.00	0.500	2.200	0.70	0.0010					
STD DEV (GEOM *)		3.54	0.071	0.141	2.05	0.0000					
# SAMP IN STATISTICS		2	2	2	2	2					
% SAMP (EXCLUDED)											

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1983 WATER QUALITY DATA REGION 6

191

B.O.W./ SITE: WINDIGO RIVER
 SAMPLE POINT: WINDIGO RIVER ABOVE MUSKRAT
 STATION TYPE: RIVER FLOW GAUGE FED 04CB001

DAM LAKE
 MAJOR BASIN: GREAT LAKES
 MINOR BASIN: JAMES BAY SHORE
 TERM STREAM: SEVERN RIVER

STATION ID: 19-0008-005-02

STORET CODE: 04
 001
 0008

LAT: 53 17 38.15 LONG: 091 49 14.84 U T M: 15 0578600.0 5905400.0 4 REGION: 06 DISTANCE: 82.880

*INTERIM TEST-NAME:		FWSADP	FGPROJ	ALKT	ALUT	ASUT	CAUR	CDUT	CLIDUR	COLAP	COND25
				ALK	ALUMINUM	ARSENIC	CALCIUM	CADMIUM	CHLORIDE	COLOUR	CONDUCT.
SAMPLE DATE	YEAR	SAMPLE DEPTH	PROJECT SUB-PROJ	TOTAL MG/L	UNF.TOT. MG/L	UNF.TOT. MG/L	UNF.REAC MG/L	UNF.TOT. MG/L	UNF.REAC MG/L	APPARENT HZU	25C UMHO/CM AT 25 C
YYMMDD	LMT	NUMBER	CODE	AS CAC03	AS AL	AS AS	AS CA	AS CD	AS CL-		
830519		13	0101	25.0			8.600		0.100	61.000	55.0
830923		27	0101	43.0	1.200	0.0010<	14.000	0.0005<	0.200	60.000	90.0
MAXIMUM		0.30		43.0	1.200		14.000		0.200	61.000	90.0
ARITH MEAN		0.30		34.0	1.200		11.300		0.150	60.500	72.5
GEOM MEAN				32.8			10.973		0.141	60.498	70.4
MINIMUM		0.30		25.0	1.200		8.600		0.100	60.000	55.0
STD DEV (GEOM *)				12.7			3.818		0.071	0.707	24.7
# SAMP IN STATISTICS		2		2	1		2		2	2	2
% SAMP (EXCLUDED)											

*INTERIM TEST-NAME:		COUT	CRUT	CUUT	FEUT	HARDT	HGUT	KKUR	MGUR	MNUT	NAUR
		COBALT	CHROMIUM	COPPER	IRON	HARDNESS	MERCURY	POTASSIUM	MAGNESIUM	MANGANESE	SODIUM
SAMPLE DATE	YEAR	UNF.TOT. MG/L	UNF.TOT. MG/L	UNF.TOT. MG/L	UNF.TOT. MG/L	TOTAL MG/L	UNF.TOT. UG/L	UNF.REAC MG/L	FIL.REAC MG/L	UNF.TOT. MG/L	UNF.REAC MG/L
YYMMDD	LMT	AS CO	AS CR	AS CU	AS FE	AS CAC03	AS HG	AS K	AS MG	AS MN	AS NA
830519		13			0.3700	27.000		0.47	1.800	0.009	0.670
830923		27	0.0020<	0.0030	0.0020	1.1000	0.110	0.65	3.300	0.047	0.990
MAXIMUM			0.0030	0.0020	1.1000	49.000	0.110	0.65	3.300	0.047	0.990
ARITH MEAN			0.0030	0.0020	0.7350	38.000	0.110	0.56	2.550	0.028	0.830
GEOM MEAN					0.6380	36.373		0.55	2.437	0.021	0.814
MINIMUM			0.0030	0.0020	0.3700	27.000	0.110	0.47	1.800	0.009	0.670
STD DEV (GEOM *)					0.5162	15.556		0.13	1.061	0.027	0.226
# SAMP IN STATISTICS			1	1	2	2	1	2	2	2	2
% SAMP (EXCLUDED)											

(CONTD)

1983 WATER QUALITY DATA REGION 6

192

B.C.W./ SITE: WINDIGO RIVER
 SAMPLE POINT: WINDIGO RIVER ABOVE MUSKRAT
 STATION TYPE: RIVER FLOW GAUGE FED 04CB001

DAM LAKE
 MAJOR BASIN: GREAT LAKES
 MINOR BASIN: JAMES BAY SHORE
 TERM STREAM: SEVERN RIVER

STATION ID: 19-0008-005-02

STORET CODE: 04
 001
 0008

LAT: 53 17 38.15 LONG: 091 49 14.84 U T M: 15 0578600.0 5905400.0 4 REGION: 06 DISTANCE: 82.880

*=-INTERIM TEST-NAME:		NIUT	NNHTFR NH3-N TOTAL	NNO2FR NO2-N FIL.REAC	NNO3FR NO3-N FIL.REAC	NNTKUR K'DAHL N TOTAL	PBUT LEAD UNF.TOT.	PH	PP04FR PO4 FIL.REAC	PPUT PHOSPHOR UNF.TOT.	RSP RESIDUE PARTIC.
SAMPLE DATE YYMMDD	DATE HOUR LMT	SAMPLE NUMBER	UNF.TOT. MG/L AS NI	FIL.REAC MG/L AS N	FIL.REAC MG/L AS N	FIL.REAC MG/L AS N	UNF.TOT. MG/L AS PB	PH	MG/L AS P	MG/L AS P	MG/L
830519		13		0.020	0.002	0.010<	0.440	7.00	0.001	0.022	5.00
830923		27	0.003	0.050	0.005	0.010	0.620	7.30	0.012	0.054	20.00
		MAXIMUM	0.003	0.050	0.005	0.010	0.620	7.30	0.012	0.054	20.00
		ARITH MEAN	0.003	0.035	0.003	0.010	0.530	7.15	0.006	0.038	12.50
		GEOM MEAN		0.032	0.003		0.522	7.15	0.003	0.034	10.00
		MINIMUM	0.003	0.020	0.002	0.010	0.440	7.00	0.001	0.022	5.00
		STD DEV (GEOM *)		0.021	0.002		0.127	0.21	0.008	0.023	10.61
		# SAMP IN STATISTICS	1	2	2	1	2	2	2	2	2
		% SAMP (EXCLUDED)				50					

*=-INTERIM TEST-NAME:		RST	SIO3UR SILICATE UNF.REAC	SS04UR SULPHATE UNF.REAC	TURB TURB'ITY FTU	ZNUT ZINC UNF.TOT.
SAMPLE DATE YYMMDD	DATE HOUR LMT	SAMPLE NUMBER	RESIDUE TOTAL MG/L	MG/L AS SI	MG/L AS S04	MG/L AS ZN
830519		13	65.00	0.800	1.000	1.90
830923		27	120.00	1.400	1.400	18.00
		MAXIMUM	120.00	1.400	1.400	18.00
		ARITH MEAN	92.50	1.100	1.200	9.95
		GEOM MEAN	88.32	1.058	1.183	5.85
		MINIMUM	65.00	0.800	1.000	1.90
		STD DEV (GEOM *)	38.89	0.424	0.283	11.38
		# SAMP IN STATISTICS	2	2	2	2
		% SAMP (EXCLUDED)				1

1983 WATER QUALITY DATA REGION 6

193

B.O.W./ SITE: SACHIGO RIVER
 SAMPLE POINT: SACHIGO RIVER BELOW OUTLET OF
 STATION TYPE: RIVER FLOW GAUGE FED 04CD002

SACHIGO LAKE
 MAJOR BASIN: GREAT LAKES
 MINOR BASIN: JAMES BAY SHORE
 TERM STREAM: SEVERN RIVER

STATION ID: 19-0008-006-02

STORET CODE: 04
 001
 0008

LAT: 53 06 16.41 LONG: 084 15 26.57 U T M: 16 0683600.0 5887200.0 4 REGION: 06 DISTANCE: 56.320

*=INTERIM TEST-NAME:		FWSADP	FGPROJ	ALKT	ALUT	ASUT	CAUR	CDUT	CLIDUR	COLAP	COND25
SAMPLE		SAMPLE	PROJECT	ALK	ALUMINUM	ARSENIC	CALCIUM	CADMIUM	CHLORIDE	COLOUR	CONDUCT.
DATE	HOUR	DEPTH	SUB-PROJ	TOTAL	UNF.TOT.	UNF.TOT.	UNF.REAC	UNF.TOT.	UNF.REAC	APPARENT	25C
YYMMDD	LMT	NUMBER	CODE	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	HZU	UMHO/CM
		M	AS CAC03	AS AL	AS AS	AS CA	AS CD	AS CL-		AT 25 C	
830519		14	0101	49.0	0.100	0.0010<	16.000	0.0005<	0.200	70.000	101.0
830924		28	0101	59.0	2.000	0.0010<	19.000	0.0007	0.300	74.000	120.0
		MAXIMUM		59.0	2.000		19.000	0.0007	0.300	74.000	120.0
		ARITH MEAN		54.0	1.050		17.500	0.0007	0.250	72.000	110.5
		GEOM MEAN		53.8	0.447		17.436		0.245	71.972	110.1
		MINIMUM		49.0	0.100		16.000	0.0007	0.200	70.000	101.0
		STD DEV (GEOM *)		7.1	1.344		2.121		0.071	2.828	13.4
		# SAMP IN STATISTICS	2	2	2		2	1	2	2	2
		% SAMP (EXCLUDED)						50			

*=INTERIM TEST-NAME:		COBT	CRUT	CUUT	FEUT	HARDT	HGUT	KKUR	MGUR	MNUT	NAUR
SAMPLE		COBALT	CHROMIUM	COPPER	IRON	HARDNESS	MERCURY	POTASSIM	MAGNESIM	MANGANSE	SODIUM
DATE	HOUR	UNF.TOT.	UNF.TOT.	UNF.TOT.	UNF.TOT.	TOTAL	UNF.TOT.	UNF.REAC	FIL.REAC	UNF.TOT.	UNF.REAC
YYMMDD	LMT	MG/L	MG/L	MG/L	MG/L	MG/L	UG/L	MG/L	MG/L	MG/L	MG/L
		AS CO	AS CR	AS CU	AS FE	AS CAC03	AS HG	AS K	AS MG	AS MN	AS NA
830519		14	0.0020<	0.0030	0.0010	0.3300	51.000	0.110	0.68	3.300	1.100
830924		28	0.0020<	0.0050	0.0030	2.0000	63.000	0.019	1.20	3.800	1.100
		MAXIMUM		0.0050	0.0030	2.0000	63.000	0.110	1.20	3.800	1.100
		ARITH MEAN		0.0040	0.0020	1.1650	57.000	0.064	0.94	3.550	1.100
		GEOM MEAN		0.0039	0.0017	0.8124	56.683	0.046	0.90	3.541	1.100
		MINIMUM		0.0030	0.0010	0.3300	51.000	0.019	0.68	3.300	1.100
		STD DEV (GEOM *)		0.0014	0.0014	1.1809	8.485	0.064	0.37	0.354	0.008
		# SAMP IN STATISTICS	2	2	2	2	2	2	2	2	2
		% SAMP (EXCLUDED)									

(CONTD)

1983 WATER QUALITY DATA REGION 6

194

B.O.W./ SITE: SACHIGO RIVER
 SAMPLE POINT: SACHIGO RIVER BELOW OUTLET OF
 STATION TYPE: RIVER FLOW GAUGE FED 04CD002

SACHIGO LAKE
 MAJOR BASIN: GREAT LAKES
 MINOR BASIN: JAMES BAY SHORE
 TERM STREAM: SEVERN RIVER

STATION ID: 19-0008-006-02

STORET CODE: 04
 001
 0008

LAT: 53 06 16.41 LONG: 084 15 26.57 U T M: 16 0683600.0 5887200.0 4 REGION: 06 DISTANCE: 56.320

*=INTERIM TEST-NAME:		NIUT	NNHTFR NH3-N TOTAL	NN02FR NO2-N	NN03FR NO3-N	NNTKUR K'DAHL N TOTAL	PBUT LEAD	PH	PP04FR PO4 FIL.REAC	PPUT PHOSPHOR UNF.TOT.	RSP RESIDUE PARTIC.	
SAMPLE DATE	HOUR	SAMPLE NUMBER	UNF.TOT. MG/L AS NI	FIL.REAC MG/L AS N	FIL.REAC MG/L AS N	UNF.REAC MG/L AS N	UNF.TOT. MG/L AS PB	PH	MG/L AS P	MG/L AS P	MG/L	
830519		14	0.002<	0.030	0.002	0.020	0.460	0.003<	7.00	0.001	0.018	3.00
830924		28	0.003	0.020	0.008	0.030	0.490	0.003<	7.50	0.030	0.068	20.00
		MAXIMUM	0.003	0.030	0.008	0.030	0.490		7.50	0.030	0.068	20.00
		ARITH MEAN	0.003	0.025	0.005	0.025	0.475		7.25	0.015	0.043	11.50
		GEOM MEAN		0.024	0.004	0.024	0.475		7.25	0.005	0.035	7.75
		MINIMUM	0.003	0.020	0.002	0.020	0.460		7.00	0.001	0.018	3.00
		STD DEV (GEOM *)		0.007	0.004	0.007	0.021		0.35	0.021	0.035	12.02
		# SAMP IN STATISTICS	1	2	2	2	2		2	2	2	2
		% SAMP (EXCLUDED)	50									

*=INTERIM TEST-NAME:		RST	SIO3UR SILICATE UNF.REAC	SS04UR SULPHATE UNF.REAC	TURB TURB'ITY FTU	ZNUT ZINC UNF.TOT.
SAMPLE DATE	HOUR	SAMPLE NUMBER	RESIDUE TOTAL MG/L	MG/L AS SI	MG/L AS S04	MG/L AS ZN
830519		14	100.00	1.300	1.000	0.0020
830924		28	150.00	1.800	2.100	0.0060
		MAXIMUM	150.00	1.800	2.100	0.0060
		ARITH MEAN	125.00	1.550	1.550	0.0040
		GEOM MEAN	122.47	1.530	1.449	0.0035
		MINIMUM	100.00	1.300	1.000	0.0020
		STD DEV (GEOM *)	35.36	0.354	0.778	0.0028
		# SAMP IN STATISTICS	2	2	2	2
		% SAMP (EXCLUDED)				

1983 WATER QUALITY DATA REGION 6

195

B.O.W./ SITE: BIG TROUT LAKE
 SAMPLE POINT: BIG TROUT LAKE AT TROUT LAKE
 STATION TYPE: RIVER FLOW GAUGE FED 04CE001

STATION ID: 19-0008-007-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: JAMES BAY SHORE
 TERM STREAM: SEVERN RIVER

STORET CODE: 04
 001
 0008

LAT: 20 00 09.79 LONG: 039 58 30.99 U T M: 16 5962600.0 3116200.0 4 REGION: 06 DISTANCE: 52.880

*INTERIM TEST-NAME:		FWSADP	FGPROJ	ALKT	ALUT	ASUT	CAUR	CDUT	CLIDUR	COLAP	COND25
SAMPLE DATE	TIME	SAMPLE DEPTH	PROJECT SUB-PROJ CODE	ALK TOTAL MG/L	ALUMINUM UNF.TOT. MG/L	ARSENIC UNF.TOT. MG/L	CALCIUM UNF.REAC MG/L	CADMIUM UNF.TOT. MG/L	CHLORIDE UNF.REAC MG/L	COLOUR APPARENT HZU	CONDUCT. 25C UMHO/CM AT 25 C
YYMMDD	LMT	NUMBER		AS CACO3	AS AL	AS AS	AS CA	AS CD	AS CL-		
830519		21	0101	39.0	0.030	0.0010<	13.000	0.0005<	0.200	20.000	81.0
830928		35	0101	54.0	0.040	0.0010<	18.000	0.0005<	0.300	19.000	114.0
		MAXIMUM	0.30	54.0	0.040		18.000		0.300	20.000	114.0
		ARITH MEAN	0.30	46.5	0.035		15.500		0.250	19.500	97.5
		GEOM MEAN		45.9	0.035		15.297		0.245	19.494	96.1
		MINIMUM	0.30	39.0	0.030		13.000		0.200	19.000	81.0
		STD DEV (GEOM *)		10.6	0.007		3.536		0.071	0.707	23.3
		# SAMP IN STATISTICS	2	2	2		2		2	2	2
		% SAMP (EXCLUDED)									
*INTERIM TEST-NAME:											
		COBALT	CHROMIUM	COPPER	IRON	HARDT	HGUT	KKUR	MGUR	HNUT	NAUR
SAMPLE DATE	TIME	UNF.TOT. MG/L	UNF.TOT. MG/L	UNF.TOT. MG/L	UNF.TOT. MG/L	TOTAL MG/L	UNF.TOT. UG/L	UNF.REAC MG/L	FIL.REAC MG/L	UNF.TOT. MG/L	UNF.REAC MG/L
YYMMDD	LMT	AS CO	AS CR	AS CU	AS FE	AS CACO3	AS HG	AS K	AS MG	AS MN	AS NA
830519		21	0.0020<	0.0040	0.0010	0.1400	39.000	0.045	0.19	2.200	0.016
830928		35	0.0020<	0.0020	0.0020	0.1100	58.000	0.018	0.24	3.100	0.026
		MAXIMUM		0.0040	0.0020	0.1400	58.000	0.045	0.24	3.100	0.026
		ARITH MEAN		0.0040	0.0015	0.1250	48.500	0.031	0.21	2.650	0.021
		GEOM MEAN			0.0014	0.1241	47.560	0.028	0.21	2.612	0.020
		MINIMUM		0.0040	0.0010	0.1100	39.000	0.018	0.19	2.200	0.016
		STD DEV (GEOM *)			0.0007	0.0212	13.435	0.019	0.04	0.636	0.007
		# SAMP IN STATISTICS	1	2	2	2	2	2	2	2	2
		% SAMP (EXCLUDED)	50								

(CONTD)

1983 WATER QUALITY DATA REGION 6

196

B.O.W./ SITE: BIG TROUT LAKE
 SAMPLE POINT: BIG TROUT LAKE AT TROUT LAKE
 STATION TYPE: RIVER FLOW GAUGE FED 04CE001

STATION ID: 19-0008-007-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: JAMES BAY SHORE
 TERM STREAM: SEVERN RIVER

STORET CODE: 04
 001
 0008

LAT: 20 00 09.79 LONG: 039 58 30.99 U T M: 16 5962600.0 3116200.0 4 REGION: 06 DISTANCE: 52.880

*=INTERIM TEST-NAME:		NIUT	NNHTFR NH3-N TOTAL	NN02FR NO2-N FIL.REAC	NN03FR NO3-N FIL.REAC	NNTKUR K'DAHL N TOTAL	PBUT LEAD UNF.TOT.	PH	PP04FR PO4 FIL.REAC	PPUT PHOSPHOR UNF.TOT.	RSP RESIDUE PARTIC.	
SAMPLE DATE YYMMDD	HOUR LMT	SAMPLE NUMBER	UNF.TOT. MG/L AS NI	FIL.REAC MG/L AS N	FIL.REAC MG/L AS N	UNF.REAC MG/L AS N	UNF.REAC MG/L AS PB	PH	MG/L AS P	MG/L AS P	MG/L	
830519		21	0.002<	0.020	0.002	0.010<	0.260	0.003<	7.50	0.002	0.009	2.00
830928		35	0.002<	0.030	0.001<	0.010	0.430	0.003<	7.70	0.001	0.020	4.00
MAXIMUM				0.030	0.002	0.010	0.430		7.70	0.002	0.020	4.00
ARITH MEAN				0.025	0.002	0.010	0.345		7.60	0.001	0.014	3.00
GEOM MEAN				0.024			0.334		7.60	0.001	0.013	2.83
MINIMUM				0.020	0.002	0.010	0.260		7.50	0.001	0.009	2.00
STD DEV (GEOM *)				0.007			0.120		0.14	0.001	0.008	1.41
# SAMP IN STATISTICS				2	1	1	2		2	2	2	2
% SAMP (EXCLUDED)					50	50						

*=INTERIM TEST-NAME:		RST	SI03UR SILICATE UNF.REAC	SS04UR SULPHATE UNF.REAC	TURB TURB'ITY FTU	ZNUT ZINC UNF.TOT.
SAMPLE DATE YYMMDD	HOUR LMT	SAMPLE NUMBER	RESIDUE TOTAL MG/L AS SI	MG/L AS S04		MG/L AS ZN
830519		21	90.00	0.400	1.100	0.55
830928		35	100.00	1.000	1.000<	1.30
MAXIMUM			100.00	1.000	1.100	1.30
ARITH MEAN			95.00	0.700	1.100	0.92
GEOM MEAN			94.87	0.632		0.85
MINIMUM			90.00	0.400	1.100	0.55
STD DEV (GEOM *)			7.07	0.424		0.53
# SAMP IN STATISTICS			2	2	1	2
% SAMP (EXCLUDED)					50	

1983 WATER QUALITY DATA REGION 6

197

B.O.W./ SITE: SANDY LAKE
 SAMPLE POINT: SANDY LAKE AT SANDY LAKE
 STATION TYPE: RIVER FLOW GAUGE FED 04CA001

STATION ID: 19-0008-008-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: JAMES BAY SHORE
 TERM STREAM: SEVERN RIVER

STORET CODE: 04
 001
 0008

LAT: 53 01 34.50 LONG: 093 14 18.78 U T M: 15 0484000.0 5875000.0 4 REGION: 06 DISTANCE: 94.080

*=INTERIM TEST-NAME:		FWSADP	FGPROJ	ALKT	ALUT	ASUT	CAUR	CDUT	CLIDUR	COLAP	COND25
				ALK	ALUMINUM	ARSENIC	CALCIUM	CADMIUM	CHLORIDE		CONDUCT.
SAMPLE		SAMPLE	PROJECT	TOTAL	UNF.TOT.	UNF.TOT.	UNF.REAC	UNF.TOT.	UNF.REAC	COLOUR	25C
DATE	HR	DEPTH	SUB-PROJ	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	APPARENT	UMHO/CM
YYMMDD	LMT	M	CODE	AS CAC03	AS AL	AS AS	AS CA	AS CD	AS CL-	HZU	AT 25 C
830519		15	0101	22.0	0.260	0.0010<	7.200	0.0005	0.300	83.000	51.0
830923		24	0101	51.0	8.800	0.0010<	17.000	0.0009	0.700	269.000	106.0
		MAXIMUM		51.0	8.800		17.000	0.0009	0.700	269.000	106.0
		ARITH MEAN		36.5	4.530		12.100	0.0007	0.500	176.000	78.5
		GEOM MEAN		33.5	1.513		11.063	0.0007	0.458	149.422	73.5
		MINIMUM		22.0	0.260		7.200	0.0005	0.300	83.000	51.0
		STD DEV (GEOM *)		20.5	6.039		6.930	0.0003	0.283	131.522	38.9
		# SAMP IN STATISTICS	2	2	2		2	2	2	2	2
		% SAMP (EXCLUDED)									

*=INTERIM TEST-NAME:		COBT	CRUT	CUUT	FEUT	HARDT	HGUT	KKUR	MGUR	MNUT	NAUR
		COBALT	CHROMIUM	COPPER	IRON	HARDNESS	MERCURY	POTASSIM	MAGNESIM	MANGANSE	SODIUM
SAMPLE		UNF.TOT.	UNF.TOT.	UNF.TOT.	UNF.TOT.	TOTAL	UNF.TOT.	UNF.REAC	FIL.REAC	UNF.TOT.	UNF.REAC
DATE	HR	MG/L	MG/L	MG/L	MG/L	MG/L	UG/L	MG/L	MG/L	MG/L	MG/L
YYMMDD	LMT	AS CO	AS CR	AS CU	AS FE	AS CAC03	AS HG	AS K	AS MG	AS MN	AS NA
830519		15	0.0020<	0.0020	0.0020	0.4700	22.000	0.038	0.74	2.000	1.100
830923		24	0.0020<	0.0180	0.0120	9.1000	60.000	0.050	3.40	4.500	2.300
		MAXIMUM		0.0180	0.0120	9.1000	60.000	0.050	3.40	4.500	2.300
		ARITH MEAN		0.0100	0.0070	4.7850	41.000	0.044	2.07	3.250	1.700
		GEOM MEAN		0.0060	0.0049	2.0681	36.332	0.044	1.59	3.000	1.591
		MINIMUM		0.0020	0.0020	0.4700	22.000	0.038	0.74	2.000	1.100
		STD DEV (GEOM *)		0.0113	0.0071	6.1023	26.870	0.008	1.88	1.768	0.849
		# SAMP IN STATISTICS		2	2	2	2	2	2	2	2
		% SAMP (EXCLUDED)									

(CONTD)

B.O.W./ SITE: SANDY LAKE
SAMPLE POINT: SANDY LAKE AT SANDY LAKE
STATION TYPE: RIVER FLOW GAUGE FED 04CA001

MAJOR BASIN: GREAT LAKES
MINOR BASIN: JAMES BAY SHORE
TERM STREAM: SEVERN RIVER

STATION ID: 19-0008-008-02

STORET CODE: 04
001
0008

LAT: 53 01 34.50 LONG: 093 14 18.78

U T M: 15 0484000.0 5875000.0 4

REGION: 06

DISTANCE: 94.080

*INTERIM		TEST-NAME:	NIUT	NHHTFR NH3-N TOTAL	NO2FR	NO3FR	NNTKUR K'DAHL N TOTAL	PBUT	PH	PO4FR	PPUT	RSP
SAMPLE DATE YYMMDD	HOURL LMT	SAMPLE NUMBER	NICKEL UNF.TOT. MG/L AS NI	FIL.REAC MG/L AS N	FIL.REAC MG/L AS N	FIL.REAC MG/L AS N	UNF.REAC MG/L AS N	UNF.TOT. MG/L AS PB	PH	FIL.REAC MG/L AS P	UNF.TOT. MG/L AS P	RESIDUE PARTIC. MG/L
830519		15	0.002<	0.030	0.003	0.020	0.490	0.003<	6.70	0.003	0.024	6.00
830923		24	0.011	0.060	0.030	0.020	0.800	0.003	8.00	0.130	0.280	170.00
		MAXIMUM	0.011	0.060	0.030	0.020	0.800	0.003	8.00	0.130	0.280	170.00
		ARITH MEAN	0.011	0.045	0.016	0.020	0.645	0.003	7.35	0.066	0.152	88.00
		GEOM MEAN		0.042	0.009	0.020	0.626		7.32	0.020	0.082	31.94
		MINIMUM	0.011	0.030	0.003	0.020	0.490	0.003	6.70	0.003	0.024	6.00
		STD DEV (GEOM *)		0.021	0.019	0.000	0.219		0.92	0.090	0.181	115.97
# SAMP IN STATISTICS			1	2	2	2	2	1	2	2	2	2
% SAMP (EXCLUDED)			50					50				

* = INTERIM		TEST-NAME:	RST	SI03UR	SS04UR	TURB	ZNUT
			SILICATE	SULPHATE		ZINC	
			UNF. REAC	UNF. REAC		UNF. TOT.	
SAMPLE			MG/L	MG/L		MG/L	
DATE	HRUR	SAMPLE	TOTAL	AS SI	AS SO4	TURB.ITY	AS ZN
YYMMDD	LMT	NUMBER	MG/L			FTU	
830519		15	80.00	1.000	1.700	4.10	0.0010
830923		24	360.00	1.900	6.000	130.00	0.0280
MAXIMUM			360.00	1.900	6.000	130.00	0.0280
ARITH MEAN			220.00	1.450	3.850	67.05	0.0145
GEOM MEAN			169.71	1.378	3.194	23.09	0.0053
MINIMUM			80.00	1.000	1.700	4.10	0.0010
STD DEV (GEOM *)			197.99	0.636	3.041	89.02	0.0191
# SAMP IN STATISTICS			2	2	2	2	2
% SAMP (EXCLUDED)							

1983 WATER QUALITY DATA REGION 6

199

B.O.W./ SITE: ASHEWEIG RIVER
 SAMPLE POINT: ASHEWEIG RIVER AT STRAIGHT LAKE
 STATION TYPE: RIVER FLOW GAUGE FED 04DB001

STATION ID: 19-0018-002-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: JAMES BAY SHORE
 TERM STREAM: WINISK RIVER

STORET CODE: 04
 001
 0018

LAT: 53 48 01.13 LONG: 087 49 11.51 U T M: 16 0446000.0 5961400.0 4 REGION: 06 DISTANCE: 30.720

*INTERIM TEST-NAME:		FWSADP	FGPROJ	ALKT	ALUT	ASUT	CAUR	CDUT	CLIDUR	COLAP	COND25
				ALK	ALUMINUM	ARSENIC	CALCIUM	CADMIUM	CHLORIDE		CONDUCT.
SAMPLE DATE	HOUR	SAMPLE	PROJECT	TOTAL	UNF.TOT.	UNF.TOT.	UNF.REAC	UNF.TOT.	UNF.REAC	COLOUR	25C
YYMMDD	LMT	NUMBER	SUB-PROJ	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	APPARENT	UMHO/CM
			CODE	AS CAC03	AS AL	AS AS	AS CA	AS CD	AS CL-	HZU	AT 25 C
830519		18	0101	64.0	0.070	0.0010<	2.000	0.0007	0.400	45.000	131.0
830927		31	0101	47.0	0.030	0.0010	16.000	0.0006	0.500	29.000	102.0
MAXIMUM		0.30		64.0	0.070	0.0010	16.000	0.0007	0.500	45.000	131.0
ARITH MEAN		0.30		55.5	0.050	0.0010	9.000	0.0006	0.450	37.000	116.5
GEOM MEAN				54.8	0.046		5.657	0.0006	0.447	36.125	115.6
MINIMUM		0.30		47.0	0.030	0.0010	2.000	0.0006	0.400	29.000	102.0
STD DEV (GEOM *)				12.0	0.028		9.899	0.0001	0.071	11.314	20.5
# SAMP IN STATISTICS		2		2	2	1	2	2	2	2	2
% SAMP (EXCLUDED)						50					

*INTERIM TEST-NAME:		COUT	CRUT	CUUT	FEUT	HARDT	HGUT	KKUR	MGUR	MNUT	NAUR
		COBALT	CHROMIUM	COPPER	IRON	HARDNESS	MERCURY	POTASSIM	MAGNESIM	MANGANSE	SODIUM
SAMPLE DATE	HOUR	UNF.TOT.	UNF.TOT.	UNF.TOT.	UNF.TOT.	TOTAL	UNF.TOT.	UNF.REAC	FIL.REAC	UNF.TOT.	UNF.REAC
YYMMDD	LMT	MG/L	MG/L	MG/L	MG/L	MG/L	UG/L	MG/L	MG/L	MG/L	MG/L
		AS CO	AS CR	AS CU	AS FE	AS CAC03	AS HG	AS K	AS MG	AS MN	AS NA
830519		18	0.0140	0.0070	0.1500	69.000	0.066	0.40	4.000	0.012	0.480
830927		31	0.0040	0.0030	0.1500	52.000	0.029	0.48	2.900	0.029	1.300
MAXIMUM			0.0140	0.0070	0.1500	69.000	0.066	0.48	4.000	0.029	1.300
ARITH MEAN			0.0090	0.0050	0.1500	60.500	0.047	0.44	3.450	0.020	0.890
GEOM MEAN			0.0075	0.0046	0.1500	59.900	0.044	0.44	3.406	0.019	0.790
MINIMUM			0.0040	0.0030	0.1500	52.000	0.029	0.40	2.900	0.012	0.480
STD DEV (GEOM *)			0.0071	0.0028	0.0000	12.021	0.026	0.06	0.778	0.012	0.580
# SAMP IN STATISTICS			2	2	2	2	2	2	2	2	2
% SAMP (EXCLUDED)											

(CONTD)

1983 WATER QUALITY DATA REGION 6

200

B.O.W./ SITE: ASHEWEIG RIVER
 SAMPLE POINT: ASHEWEIG RIVER AT STRAIGHT LAKE
 STATION TYPE: RIVER FLOW GAUGE FED 04DB001

STATION ID: 19-0018-002-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: JAMES BAY SHORE
 TERM STREAM: WINISK RIVER

STORET CODE: 04
 001
 0018

LAT: 53 48 01.13 LONG: 087 49 11.51

U T M: 16 0446000.0 5961400.0 4

REGION: 06

DISTANCE: 30.720

*INTERIM		TEST-NAME:	NIUT	NNHTFR NH3-N TOTAL	NN02FR NO2-N	NN03FR NO3-N	NNTKUR K'DAHL N TOTAL	PBUT LEAD	PH	PP04FR PO4 FIL.REAC	PPUT PHOSPHOR UNF.TOT.	RSP RESIDUE PARTIC.
SAMPLE DATE YYMMDD	HOUR LMT	SAMPLE NUMBER	UNF.TOT. MG/L AS NI	FIL.REAC MG/L AS N	FIL.REAC MG/L AS N	FIL.REAC MG/L AS N	UNF.REAC MG/L AS N	UNF.TOT. MG/L AS PB	PH	FIL.REAC MG/L AS P	UNF.TOT. MG/L AS P	RESIDUE PARTIC. MG/L
830519		18	0.002<	0.030	0.004	0.090	0.470	0.005	7.60	0.001	0.008	2.00
830927		31	0.002<	0.080	0.001	0.010	0.560	0.003<	7.60	0.003	0.021	6.00
MAXIMUM				0.080	0.004	0.090	0.560	0.005	7.60	0.003	0.021	6.00
ARITH MEAN				0.055	0.002	0.050	0.515	0.005	7.60	0.002	0.014	4.00
GEOM MEAN				0.049	0.002	0.030	0.513		7.60	0.002	0.013	3.46
MINIMUM				0.030	0.001	0.010	0.470	0.005	7.60	0.001	0.008	2.00
STD DEV (GEOM *)				0.035	0.002	0.057	0.064		0.00	0.001	0.009	2.83
# SAMP IN STATISTICS				2	2	2	2	1	2	2	2	2
% SAMP (EXCLUDED)								50				
*INTERIM		TEST-NAME:	RST	SI03UR SILICATE	SS04UR SULPHATE	TURB	ZNUT ZINC					
SAMPLE DATE YYMMDD	HOUR LMT	SAMPLE NUMBER	RESIDUE TOTAL MG/L	UNF.REAC MG/L AS SI	UNF.REAC MG/L AS S04	TURB*ITY FTU	UNF.TOT. MG/L AS ZN					
830519		18	120.00	1.200	1.300	0.40	0.0120					
830927		31	110.00	1.200	1.000<	0.65	0.0060					
MAXIMUM			120.00	1.200	1.300	0.65	0.0120					
ARITH MEAN			115.00	1.200	1.300	0.52	0.0090					
GEOM MEAN			114.89	1.200		0.51	0.0085					
MINIMUM			110.00	1.200	1.300	0.40	0.0060					
STD DEV (GEOM *)			7.07	0.000		0.18	0.0042					
# SAMP IN STATISTICS			2	2	1	2	2					
% SAMP (EXCLUDED)					50							

1983 WATER QUALITY DATA REGION 6

201

B.O.W./ SITE: PIPESTONE RIVER
 SAMPLE POINT: PIPESTONE RIVER AT KARL LAKE
 STATION TYPE: RIVER FLOW GAUGE FED 04DA001

STATION ID: 19-0018-003-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: JAMES BAY SHORE
 TERM STREAM: MINISK RIVER

STORET CODE: 04
 001
 0018

LAT: 52 34 13.54 LONG: 090 10 53.88 U T M: 15 0691000.0 5828000.0 4 REGION: 06 DISTANCE: 89.920

*INTERIM TEST-NAME:		FWSADP	FGPROJ	ALKT	ALUT	ASUT	CAUR	CDUT	CLIDUR	COLAP	COND25	
				ALK	ALUMINUM	ARSENIC	CALCIUM	CADMIUM	CHLORIDE		CONDUCT.	
SAMPLE DATE	HOUR	SAMPLE DEPTH	PROJECT SUB-PROJ	TOTAL MG/L	UNF.TOT. MG/L	UNF.TOT. MG/L	UNF.REAC MG/L	UNF.TOT. MG/L	UNF.REAC MG/L	COLOUR APPARENT	25C UMHO/CM	
YYMMDD	LMT	NUMBER	CODE	AS CAC03	AS AL	AS AS	AS CA	AS CD	AS CL-	HZU	AT 25 C	
830519		9	0101	32.0	0.120	0.0010<	11.000	0.0005<	0.200	56.000	69.0	
830813		22	0101	44.0	1.100	0.0011	15.000	0.0005<	0.300	54.000	89.0	
830924		29	0101	51.0	0.430	0.0010<	16.000	0.0009	0.400	51.000	106.0	
MAXIMUM		0.30		51.0	1.100	0.0011	16.000	0.0009	0.400	56.000	106.0	
ARITH MEAN		0.30		42.3	0.550	0.0011	14.000	0.0009	0.300	53.667	88.0	
GEOM MEAN				41.6	0.384		13.821		0.288	53.627	86.7	
MINIMUM		0.30		32.0	0.120	0.0011	11.000	0.0009	0.200	51.000	69.0	
STD DEV (GEOM *)				9.6	0.501		2.646		0.100	2.517	18.5	
# SAMP IN STATISTICS		3		3	3	1	3	1	3	3	3	
% SAMP (EXCLUDED)						66		66				
*INTERIM TEST-NAME:		COBT	CRUT	CUUT	FEUT	HARDT	HGUT	KKUR	MGUR	MNUT	NAUR	
		COBALT	CHROMIUM	COPPER	IRON	HARDNESS	MERCURY	POTASSIM	MAGNESIM	MANGANSE	SODIUM	
SAMPLE DATE	HOUR	UNF.TOT. MG/L	UNF.TOT. MG/L	UNF.TOT. MG/L	UNF.TOT. MG/L	TOTAL MG/L	UNF.TOT. UG/L	UNF.REAC MG/L	FIL.REAC MG/L	UNF.TOT. MG/L	UNF.REAC MG/L	
YYMMDD	LMT	AS CO	AS CR	AS CU	AS FE	AS CAC03	AS HG	AS K	AS MG	AS MN	AS NA	
830519		9	0.0020<	0.0020	0.0010	0.2900	34.000	0.110	0.50	2.200	0.011	0.560
830813		22	0.0020<	0.0080	0.0020	51.000	0.110	0.48	3.300			0.840
830924		29	0.0020<	0.0030	0.0050	0.5000	0.036	0.37	3.400	0.034		0.990
MAXIMUM			0.0080	0.0050	0.5000	54.000	0.110	0.50	3.400	0.034	0.990	
ARITH MEAN			0.0043	0.0027	0.3950	46.333	0.085	0.45	2.967	0.022	0.797	
GEOM MEAN			0.0036	0.0022	0.3808	45.410	0.076	0.45	2.912	0.019	0.775	
MINIMUM			0.0020	0.0010	0.2900	34.000	0.036	0.37	2.200	0.011	0.560	
STD DEV (GEOM *)			0.0032	0.0021	0.1485	10.786	0.043	0.07	0.666	0.016	0.218	
# SAMP IN STATISTICS			3	3	2	3	3	3	3	2	3	
% SAMP (EXCLUDED)												

(CONTD)

1983 WATER QUALITY DATA REGION 6

202

B.O.W./ SITE: PIPESTONE RIVER
 SAMPLE POINT: PIPESTONE RIVER AT KARL LAKE
 STATION TYPE: RIVER FLOW GAUGE FED 04DA001

STATION ID: 19-0018-003-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: JAMES BAY SHORE
 TERM STREAM: WINISK RIVER

STORET CODE: 04
 001
 0018

LAT: 52 34 13.54 LONG: 090 10 53.88

U T M: 15 0691000.0 5828000.0 4

REGION: 06

DISTANCE: 89.920

*=INTERIM TEST-NAME:		NIUT	NNHTFR NH3-N TOTAL	NN02FR NO2-N FIL.REAC	NN03FR NO3-N FIL.REAC	NNTKUR K'DAHL N TOTAL	PBUT LEAD UNF.TOT.	PH	PP04FR P04 FIL.REAC	PPUT PHOSPHOR UNF.TOT.	RSP RESIDUE PARTIC.	
SAMPLE DATE YYMMDD	HOUR LMT	SAMPLE NUMBER	UNF.TOT. MG/L AS NI	FIL.REAC MG/L AS N	FIL.REAC MG/L AS N	FIL.REAC MG/L AS N	UNF.REAC MG/L AS N	UNF.TOT. MG/L AS PB	PH	AS P	AS P	MG/L
830519		9	0.002 <	0.030	0.002	0.010	0.400	0.003<	7.20	0.001	0.015	4.00
830813		22	0.0020<	0.040	0.008	0.010<	0.620	0.003	7.60	0.013	0.073	55.00
830924		29	0.004	0.020	0.002	0.010<	0.500	0.004	7.60	0.003	0.024	10.00
MAXIMUM		0.004	0.040	0.008	0.010	0.620	0.004	7.60	0.013	0.073	55.00	
ARITH MEAN		0.004	0.030	0.004	0.010	0.507	0.003	7.47	0.006	0.037	23.00	
GEOM MEAN			0.029	0.003		0.499		7.46	0.003	0.030	13.01	
MINIMUM		0.004	0.020	0.002	0.010	0.400	0.003	7.20	0.001	0.015	4.00	
STD DEV (GEOM *)			0.010	0.003		0.110		0.23	0.006	0.031	27.87	
# SAMP IN STATISTICS		1	3	3	1	3	2	3	3	3	3	
% SAMP (EXCLUDED)		66			66		33					

*=INTERIM TEST-NAME:		RST	SI03UR SILICATE UNF.REAC	SS04UR SULPHATE UNF.REAC	TURB TURB IDITY FTU	ZNUT ZINC UNF.TOT.
SAMPLE DATE YYMMDD	HOUR LMT	SAMPLE NUMBER	RESIDUE TOTAL MG/L AS SI	MG/L AS SO4		MG/L AS ZN
830519		9	85.00	0.900	1.30	0.0010
830813		22	170.00	1.000	32.00	0.0050
830924		29	110.00	1.000<	4.10	0.0060
MAXIMUM		170.00	2.000	1.000	32.00	0.0060
ARITH MEAN		121.67	1.467	1.000	12.47	0.0040
GEOM MEAN		116.70	1.392		5.55	0.0031
MINIMUM		85.00	0.900	1.000	1.30	0.0010
STD DEV (GEOM *)		43.68	0.551		16.97	0.0026
# SAMP IN STATISTICS		3	3	2	3	3
% SAMP (EXCLUDED)				33		

1983 WATER QUALITY DATA REGION 6

203

B.O.W./ SITE: PINEIMUTA RIVER
 SAMPLE POINT: PINEIMUTA RIVER AT EYES LAKE
 STATION TYPE: RIVER FLOW GAUGE FED 04FA003

STATION ID: 19-0043-003-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: JAMES BAY SHORE
 TERM STREAM: ATTAWAPISKAT RIVER

STORET CODE: 04
 001
 0043

LAT: 52 11 59.56 LONG: 094 41 29.17 U T M: 15 0384400.0 5784400.0 4 REGION: 06 DISTANCE: 80.000

*INTERIM TEST-NAME:		FWSADP	FGPROJ	ALKT	ALUT	ASUT	CAUR	CDUT	CLIDUR	COLAP	COND25
SAMPLE		SAMPLE	PROJECT	ALK	ALUMINUM	ARSENIC	CALCIUM	CADMIUM	CHLORIDE	COLOUR	CONDUCT.
DATE	HOUR	DEPTH	SUB-PROJ	TOTAL	UNF.TOT.	UNF.TOT.	UNF.REAC	UNF.TOT.	UNF.REAC	APPARENT	25C
YYMMDD	LMT	M	CODE	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	HZU	UMHO/CM
				AS CACO3	AS AL	AS AS	AS CA	AS CD	AS CL-		AT 25 C
830519		19	0101	47.0	0.160	0.0010<	15.000	0.0008	0.500	71.000	96.0
830813		23	0101	72.0	0.350	0.0012	24.000	0.0010	0.200	97.000	138.0
830925		32	0101	93.0	0.090	0.0010	28.000	0.0014	1.100	67.000	194.0
MAXIMUM		0.30		93.0	0.350	0.0012	28.000	0.0014	1.100	97.000	194.0
ARITH MEAN		0.30		70.7	0.200	0.0011	22.333	0.0011	0.600	78.333	142.7
GEOM MEAN				68.0	0.171		21.602	0.0010	0.479	77.274	137.0
MINIMUM		0.30		47.0	0.090	0.0010	15.000	0.0008	0.200	67.000	96.0
STD DEV (GEOM *)				23.0	0.135		6.658	0.0003	0.458	16.289	49.2
# SAMP IN STATISTICS		3		3	3	2	3	3	3	3	3
% SAMP (EXCLUDED)						33					

*INTERIM TEST-NAME:		COUT	CRUT	CUUT	FEUT	HARDT	HGUT	KKUR	MGUR	MNUT	NAUR
SAMPLE		COBALT	CHROMIUM	COPPER	IRON	HARDNESS	MERCURY	POTASSIM	MAGNESIM	MANGANSE	SODIUM
DATE	HOUR	UNF.TOT.	UNF.TOT.	UNF.TOT.	UNF.TOT.	TOTAL	UNF.TOT.	UNF.REAC	FIL.REAC	UNF.TOT.	UNF.REAC
YYMMDD	LMT	MG/L	MG/L	MG/L	MG/L	MG/L	UG/L	MG/L	MG/L	MG/L	MG/L
		AS CO	AS CR	AS CU	AS FE	AS CACO3	AS HG	AS K	AS MG	AS MN	AS NA
830519		19	0.0020<	0.0030	0.0020	0.3700	50.000	0.120	1.20	3.000	0.010
830813		23	0.0020<	0.0080	0.0030		81.000	0.038	0.51	5.000	1.200
830925		32	0.0020<	0.0030	0.0020	0.3100	94.000	0.045	1.10	5.800	0.014
MAXIMUM			0.0080	0.0030	0.3700	94.000	0.120	1.20	5.800	0.014	2.000
ARITH MEAN			0.0047	0.0023	0.3400	75.000	0.068	0.94	4.600	0.012	1.240
GEOM MEAN			0.0042	0.0023	0.3387	72.476	0.059	0.88	4.431	0.012	1.077
MINIMUM			0.0030	0.0020	0.3100	50.000	0.038	0.51	3.000	0.010	0.520
STD DEV (GEOM *)			0.0029	0.0006	0.0424	22.605	0.045	0.37	1.442	0.003	0.741
# SAMP IN STATISTICS			3	3	2	3	3	3	3	2	3
% SAMP (EXCLUDED)											

(CONT'D)

1983 WATER QUALITY DATA REGION 6

204

B.O.W./ SITE: PINEIMUTA RIVER
 SAMPLE POINT: PINEIMUTA RIVER AT EYES LAKE
 STATION TYPE: RIVER FLOW GAUGE FED 04FA003

STATION ID: 19-0043-003-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: JAMES BAY SHORE
 TERM STREAM: ATTANAPISKAT RIVER

STORET CODE: 04
 001
 0043

LAT: 52 11 59.56 LONG: 094 41 29.17

U T M: 15 0384400.0 5784400.0 4

REGION: 06

DISTANCE: 80.000

*INTERIM TEST-NAME:		NIUT	NNHTFR NH3-N	NN02FR	NN03FR	NNTKUR K'DAHL N	PBUT	PH	PP04FR	PPUT	RSP
		NICKEL	TOTAL	N02-N	N03-N	TOTAL	LEAD		P04	PHOSPHOR	
SAMPLE DATE	HOUR	UNF.TOT. MG/L	FIL.REAC MG/L	FIL.REAC MG/L	FIL.REAC MG/L	UNF.REAC MG/L	UNF.TOT. MG/L		FIL.REAC MG/L	UNF.TOT. MG/L	RESIDUE PARTIC.
YYMMDD	LMT	AS NI	AS N	AS N	AS N	AS N	AS PB	PH	AS P	AS P	MG/L
830519	19	0.002<	0.040	0.004	0.030	0.440	0.006	7.40	0.002	0.018	8.00
830813	23	0.002	0.060	0.003	0.030	0.700	0.005	8.10	0.006	0.035	10.00
830925	32	0.002<	0.050	0.001	0.020	0.660	0.003	8.10	0.002	0.021	4.00
MAXIMUM		0.002	0.060	0.004	0.030	0.700	0.006	8.10	0.006	0.035	10.00
ARITH MEAN		0.002	0.050	0.003	0.027	0.600	0.005	7.87	0.003	0.025	7.33
GEOM MEAN			0.049	0.002	0.026	0.588	0.004	7.86	0.003	0.024	6.84
MINIMUM		0.002	0.040	0.001	0.020	0.440	0.003	7.40	0.002	0.018	4.00
STD DEV (GEOM *)			0.010	0.002	0.006	0.140	0.002	0.40	0.002	0.009	3.06
# SAMP IN STATISTICS		1	3	3	3	3	3	3	3	3	3
% SAMP (EXCLUDED)		66									

*INTERIM TEST-NAME:		RST	SI03UR SILICATE	SS04UR SULPHATE	TURB	ZNUT ZINC
		RESIDUE	UNF.REAC	UNF.REAC		UNF.TOT.
SAMPLE DATE	HOUR	TOTAL	MG/L	MG/L	TURB'ITY	MG/L
YYMMDD	LMT	MG/L	AS SI	AS S04	FTU	AS ZN
830519	19	120.00	0.500	1.300	3.40	0.0080
830813	23	170.00	1.600	1.000<	1.50	0.0190
830925	32	190.00	2.500	1.200	2.30	0.0020
MAXIMUM		190.00	2.500	1.300	3.40	0.0190
ARITH MEAN		160.00	1.533	1.250	2.40	0.0097
GEOM MEAN		157.08	1.260		2.27	0.0067
MINIMUM		120.00	0.500	1.200	1.50	0.0020
STD DEV (GEOM *)		36.06	1.002		0.95	0.0086
# SAMP IN STATISTICS		3	3	2	3	3
% SAMP (EXCLUDED)				33		

1983 WATER QUALITY DATA REGION 6

205

B.O.W./ SITE: OGOKI RIVER
 SAMPLE POINT: OGOKI RIVER ABOVE WHITECLAY LAKE
 STATION TYPE: RIVER FLOW GAUGE FED 04GB004

STATION ID: 19-0053-004-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: JAMES BAY SHORE
 TERM STREAM: ALBANY RIVER

STORET CODE: 04
 001
 0053

LAT: 50 55 58.95 LONG: 088 51 20.48 U T M: 16 0369600.0 5643800.0 4 REGION: 06 DISTANCE: 112.320

*INTERIM TEST-NAME:		FWSADP	FGPROJ	ALKT	ALUT	ASUT	CAUR	CDUT	CLIDUR	COLAP	COND25
SAMPLE		SAMPLE	PROJECT	ALK	ALUMINUM	ARSENIC	CALCIUM	CADMIUM	CHLORIDE	COLOUR	CONDUCT.
DATE	HOUR	DEPTH	SUB-PROJ	TOTAL	UNF. TOT.	UNF. TOT.	UNF. REAC	UNF. TOT.	UNF. REAC	APPARENT	UMHO/CM
YYMMDD	LMT	M	CODE	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	HZU	AT 25 C
830519	17	0.30	0101	16.0	0.030	0.0010<	5.200	0.0005<	0.200	41.000	38.0
830929	33	0.30	0101	16.0	0.030	0.0010<	5.800	0.0007	0.400	44.000	42.0
MAXIMUM		0.30		16.0	0.030		5.800	0.0007	0.400	44.000	42.0
ARITH MEAN		0.30		16.0	0.030		5.500	0.0007	0.300	42.500	40.0
GEOM MEAN				16.0	0.030		5.492		0.283	42.474	39.9
MINIMUM		0.30		16.0	0.030		5.200	0.0007	0.200	41.000	38.0
STD DEV (GEOM *)				0.0	0.000		0.424		0.141	2.121	2.8
# SAMP IN STATISTICS		2		2	2		2	1	2	2	2
% SAMP (EXCLUDED)								50			
*INTERIM TEST-NAME:		COUT	CRUT	CUUT	FEUT	HARDT	HGUT	KKUR	MGUR	MNUT	NAUR
SAMPLE		COBALT	CHROMIUM	COPPER	IRON	HARDNESS	MERCURY	POTASSIUM	MAGNESIUM	MANGANESE	SODIUM
DATE	HOUR	UNF. TOT.	UNF. TOT.	UNF. TOT.	UNF. TOT.	TOTAL	UNF. TOT.	UNF. REAC	FIL. REAC	UNF. TOT.	UNF. REAC
YYMMDD	LMT	MG/L	MG/L	MG/L	MG/L	MG/L	UG/L	MG/L	MG/L	MG/L	MG/L
		AS CO	AS CR	AS CU	AS FE	AS CACO3	AS HG	AS K	AS MG	AS MN	AS NA
830519	17	0.0020<	0.0020	0.0010	0.0890	16.000	0.016	0.33	1.200	0.011	0.510
830929	33	0.0020	0.0040	0.0030	0.0980		0.039	0.26	1.400	0.014	1.400
MAXIMUM		0.0020	0.0040	0.0030	0.0980	16.000	0.039	0.33	1.400	0.014	1.400
ARITH MEAN		0.0020	0.0030	0.0020	0.0935	16.000	0.027	0.29	1.300	0.012	0.955
GEOM MEAN			0.0028	0.0017	0.0934		0.025	0.29	1.296	0.012	0.845
MINIMUM		0.0020	0.0020	0.0010	0.0890	16.000	0.016	0.26	1.200	0.011	0.510
STD DEV (GEOM *)			0.0014	0.0014	0.0064		0.016	0.05	0.141	0.002	0.629
# SAMP IN STATISTICS		1	2	2	2	1	2	2	2	2	2
% SAMP (EXCLUDED)		50									

(CONTD)

B.O.W./ SITE: OGOKI RIVER
SAMPLE POINT: OGOKI RIVER ABOVE WHITECLAY LAKE
STATION TYPE: RIVER FLOW GAUGE FED 04GB004

STATION ID: 19-0053-004-02

MAJOR BASIN: GREAT LAKES
MINOR BASIN: JAMES BAY SHORE
TERM STREAM: ALBANY RIVER

STORET CODE: 04
001
0053

LAT: 50 55 58.95 LONG: 088 51 20.48

U T M: 16 0369600.0 5643800.0 4

REGION: 06

DISTANCE: 112.320

*INTERIM TEST-NAME:			NIUT	NNHTFR NH3-N TOTAL	NN02FR NO2-N	NN03FR NO3-N	NNTKUR K'DAHL N TOTAL	PBUT LEAD	PH	PP04FR PO4	PPUT PHOSPHOR	RSP
SAMPLE DATE YYMMDD	HOUR LMT	SAMPLE NUMBER	NICKEL UNF.TOT. MG/L AS NI	FIL.REAC MG/L AS N	FIL.REAC MG/L AS N	FIL.REAC MG/L AS N	UNF.REAC MG/L AS N	UNF.TOT. MG/L AS PB	PH	FIL.REAC MG/L AS P	UNF.TOT. MG/L AS P	RESIDUE PARTIC. MG/L
830519		17	0.002<	0.010	0.003	0.010	0.290	0.003<	7.00	0.002	0.004	2.00
830929		33	0.002	0.010	0.001	0.010	0.360	0.007	7.20	0.001	0.013	2.00
		MAXIMUM	0.002	0.010	0.003	0.010	0.360	0.007	7.20	0.002	0.013	2.00
		ARITH MEAN	0.002	0.010	0.002	0.010	0.325	0.007	7.10	0.001	0.008	2.00
		GEOM MEAN		0.010	0.002	0.010	0.323		7.10	0.001	0.007	2.00
		MINIMUM	0.002	0.010	0.001	0.010	0.290	0.007	7.00	0.001	0.004	2.00
		STD DEV (GEOM *)		0.000	0.001	0.000	0.049		0.14	0.001	0.006	0.00
		# SAMP IN STATISTICS	1	2	2	2	2	1	2	2	2	2
		% SAMP (EXCLUDED)	50					50				
*INTERIM TEST-NAME:			RST	SIO3UR SILICATE	SS04UR SULPHATE	TURB	ZNUT ZINC					
SAMPLE DATE YYMMDD	HOUR LMT	SAMPLE NUMBER	RESIDUE TOTAL MG/L	UNF.REAC MG/L AS SI	UNF.REAC MG/L AS S04	TURB'ITY FTU	UNF.TOT. MG/L AS ZN					
830519		17	25.00	1.200	2.600	0.40	0.0010					
830929		33	65.00	1.400	2.400	0.50	0.0030					
		MAXIMUM	65.00	1.400	2.600	0.50	0.0030					
		ARITH MEAN	45.00	1.300	2.500	0.45	0.0020					
		GEOM MEAN	40.31	1.296	2.498	0.45	0.0017					
		MINIMUM	25.00	1.200	2.400	0.40	0.0010					
		STD DEV (GEOM *)	28.28	0.141	0.141	0.07	0.0014					
		# SAMP IN STATISTICS	2	2	2	2	2					
		% SAMP (EXCLUDED)										

1983 WATER QUALITY DATA REGION 6

207

B.O.W./ SITE: CAT RIVER
 SAMPLE POINT: CAT RIVER BELOW WESLEYAN LAKE
 STATION TYPE: RIVER FLOW GAUGE FED 04GA002

STATION ID: 19-0053-005-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: JAMES BAY SHORE
 TERM STREAM: ALBANY RIVER

STORET CODE: 04
 001
 0053

LAT: 51 09 19.25 LONG: 091 36 36.56 U T M: 15 0597200.0 5667800.0 4 REGION: 06 DISTANCE: 125.120

*INTERIM TEST-NAME:		FMSADP	FGPROJ	ALKT	ALUT	ASUT	CAUR	CDUT	CLIDUR	COLAP	COND25
				ALK	ALUMINUM	ARSENIC	CALCIUM	CADMIUM	CHLORIDE		CONDUCT.
SAMPLE DATE	HOUR	SAMPLE	PROJECT	TOTAL	UNF.TOT.	UNF.TOT.	UNF.REAC	UNF.TOT.	UNF.REAC	COLOUR	25C
YYMMDD	LMT	NUMBER	SUB-PROJ	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	APPARENT	UMHO/CM
			CODE	AS CAC03	AS AL	AS AS	AS CA	AS CD	AS CL-	HZU	AT 25 C
830519		10	0101	23.0	0.010	0.0010<	8.500	0.0005<	0.200	54.000	54.0
830925		30	0101	24.0	0.010<	0.0010<	8.200	0.0005<	0.100	42.000	55.0
		MAXIMUM	0.30	24.0	0.010		8.500		0.200	54.000	55.0
		ARITH MEAN	0.30	23.5	0.010		8.350		0.150	48.000	54.5
		GEOM MEAN		23.5			8.349		0.141	47.624	54.5
		MINIMUM	0.30	23.0	0.010		8.200		0.100	42.000	54.0
		STD DEV (GEOM *)		0.7			0.212		0.071	8.485	0.7
		# SAMP IN STATISTICS	2	2	1		2		2	2	2
		% SAMP (EXCLUDED)			50						

*INTERIM TEST-NAME:		COUT	CRUT	CUUT	FEUT	HARDT	HGUT	KKUR	MGUR	HNUT	NAUR
		COBALT	CHROMIUM	COPPER	IRON	HARDNESS	MERCURY	POTASSIM	MAGNESIM	MANGANSE	SODIUM
SAMPLE DATE	HOUR	UNF.TOT.	UNF.TOT.	UNF.TOT.	UNF.TOT.	TOTAL	UNF.TOT.	UNF.REAC	FIL.REAC	UNF.TOT.	UNF.REAC
YYMMDD	LMT	MG/L	MG/L	MG/L	MG/L	MG/L	UG/L	MG/L	MG/L	MG/L	MG/L
		AS CO	AS CR	AS CU	AS FE	AS CAC03	AS HG	AS K	AS MG	AS MN	AS NA
830519		10	0.0030	0.0010	0.1100	25.000	0.160	0.39	1.600	0.005	1.000
830925		30	0.0020<	0.0020	0.1200	27.000	0.033	0.26	1.700	0.013	0.680
		MAXIMUM	0.0030	0.0020	0.1200	27.000	0.160	0.39	1.700	0.013	1.000
		ARITH MEAN	0.0030	0.0015	0.1150	26.000	0.096	0.32	1.650	0.009	0.840
		GEOM MEAN		0.0014	0.1149	25.981	0.073	0.32	1.649	0.008	0.825
		MINIMUM	0.0030	0.0010	0.1100	25.000	0.033	0.26	1.600	0.005	0.680
		STD DEV (GEOM *)		0.0007	0.0071	1.414	0.090	0.09	0.071	0.006	0.226
		# SAMP IN STATISTICS	1	2	2	2	2	2	2	2	2
		% SAMP (EXCLUDED)	50								

(CONTD)

1983 WATER QUALITY DATA REGION 6

208

B.O.W./ SITE: CAT RIVER
 SAMPLE POINT: CAT RIVER BELOW WESLEYAN LAKE
 STATION TYPE: RIVER FLOW GAUGE FED 04GA002

STATION ID: 19-0053-005-02

MAJOR BASIN: GREAT LAKES
 MINOR BASIN: JAMES BAY SHORE
 TERM STREAM: ALBANY RIVER

STORET CODE: 04
 001
 0053

LAT: 51 09 19.25 LONG: 091 36 36.56

U T M: 15 0597200.0 5667800.0 4

REGION: 06

DISTANCE: 125.120

*INTERIM TEST-NAME:		NIUT	NNHTFR NH3-N TOTAL	NNO2FR NO2-N FIL.REAC	NNO3FR NO3-N FIL.REAC	NNTKUR K'DAHL N TOTAL	PBUT LEAD UNF.TOT.	PH	PP04FR P04 FIL.REAC	PPUT PHOSPHOR UNF.TOT.	RSP RESIDUE PARTIC.
SAMPLE DATE YYMMDD	DATE HOUR LMT	SAMPLE NUMBER	UNF.TOT. MG/L AS NI	FIL.REAC MG/L AS N	FIL.REAC MG/L AS N	UNF.REAC MG/L AS N	UNF.TOT. MG/L AS PB	PH	MG/L AS P	MG/L AS P	MG/L
830519		10	0.002<	0.050	0.001	0.020	0.500	7.20	0.002	0.019	1.00
830925		30	0.002	0.010	0.001	0.010<	0.400	7.30	0.002	0.015	1.00
		MAXIMUM	0.002	0.050	0.001	0.020	0.500	7.30	0.002	0.019	1.00
		ARITH MEAN	0.002	0.030	0.001	0.020	0.450	7.25	0.002	0.017	1.00
		GEOM MEAN		0.022	0.001		0.447	7.25	0.002	0.017	1.00
		MINIMUM	0.002	0.010	0.001	0.020	0.400	7.20	0.002	0.015	1.00
		STD DEV (GEOM *)		0.028	0.000		0.071	0.07	0.000	0.003	0.00
		# SAMP IN STATISTICS	1	2	2	1	2	2	2	2	2
		% SAMP (EXCLUDED)	50			50					
*INTERIM TEST-NAME:		RST	SI03UR SILICATE UNF.REAC	SS04UR SULPHATE UNF.REAC	TURB	ZNUT ZINC UNF.TOT.					
SAMPLE DATE YYMMDD	DATE HOUR LMT	SAMPLE NUMBER	RESIDUE TOTAL MG/L	MG/L AS SI	MG/L AS S04	TURB'ITY FTU	MG/L AS ZN				
830519		10	65.00	0.800	2.000	0.45	0.0020				
830925		30	70.00	1.100	1.900	0.75	0.0010				
		MAXIMUM	70.00	1.100	2.000	0.75	0.0020				
		ARITH MEAN	67.50	0.950	1.950	0.60	0.0015				
		GEOM MEAN	67.45	0.938	1.949	0.58	0.0014				
		MINIMUM	65.00	0.800	1.900	0.45	0.0010				
		STD DEV (GEOM *)	3.54	0.212	0.071	0.21	0.0007				
		# SAMP IN STATISTICS	2	2	2	2	2				
		% SAMP (EXCLUDED)									

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RIVER BASIN	STREAM	SAMPLE POINT DESCRIPTION	DISTANCE	LOCATION CODE	C.O.M. INDEX	PAGE NO.
ALBANY RIVER	CAT RIVER	CAT RIVER BELOW WESLEYAN LAKE	125.120	19-0053-005-02	3 G-03	207
	OGOKI RIVER	OGOKI RIVER ABOVE WHITECLAY LAKE	112.320	19-0053-004-02	3 F-03	205
ATTAWAPISKAT RIVER	PINEIMUTA RIVER	PINEIMUTA RIVER AT EYES LAKE	80.000	19-0043-003-02	3 E-03	203
BLACK STURGEON RIVER	BLACK STURGEON RIVER	AT HIGHWAYS 11 AND 17	13.196	01-0092-001-02	2 A-03	83
BLACKBIRD CREEK	KIMBERLY CLARK EFFLUENT CANAL	AT HIGHWAY 17	13.196	01-0074-001-02	2 K-02	75
CURRENT RIVER	CURRENT RIVER	AT CUMBERLAND STREET THUNDER BAY	0.483	01-0104-001-02	2 B-03	85
	CURRENT RIVER	AT HIGHWAYS 11 AND 17 THUNDER BAY	2.897	01-0104-002-02	2 C-03	88
DEAD HORSE CREEK	DEAD HORSE CREEK	AT HIGHWAY NO.17	2.253	01-0068-001-02	2 J-02	72
ENGLISH RIVER	BALMER CREEK	AT BALMER LAKE OUTLET	283.400	19-0001-016-02	3 M-01	164
	BALMER CREEK	500 FEET UPSTREAM OF CHUKUNI RIVER	278.731	19-0001-032-02	3 C-02	170
	CHUKUNI RIVER	DOWNSTREAM FROM BALMER CREEK	277.765	19-0001-015-02	3 L-01	161
	HOWEY BAY	500 FEET FROM SHORE, RED LAKE	285.651	19-0001-033-01	3 D-02	173
	RED LAKE	IN BRUCE CHANNEL NEAR FERRY CROSSING	288.030	19-0001-018-01	3 B-02	168
	SNIB CREEK	AT MOUTH ST. PAUL'S BAY	295.790	19-0001-037-02	3 G-02	181
	SNIB LAKE CREEK	AT SNIB LAKE OUTLET	299.008	19-0001-017-02	3 A-02	166
	TROUTLAKE RIVER	AT HIGHWAY NO 105	233.349	19-0001-008-02	3 G-01	151
	WABIGOON RIVER	UPSTR FROM GREAT LAKES FOREST PRODUCTS	265.017	19-0001-005-02	3 E-01	145
	WABIGOON RIVER	AT GOLF COURSE BRIDGE DRYDEN	264.408	19-0001-006-02	3 F-01	148
	WABIGOON RIVER	AT MINNITAKI SIDEROAD	235.280	19-0001-035-02	3 E-02	175
	WABIGOON RIVER	HIGHWAY 609 NEAR QUIBELL	199.875	19-0001-036-02	3 F-02	178
KAMINISTIQUEUA RIVER	KAMINISTIQUEUA RIVER	AT HIGHWAY NO 61B THUNDER BAY	6.759	01-0108-001-02	2 I-03	104
	KAMINISTIQUEUA RIVER	UPSTREAM OF HIGHWAY NO 61 BRIDGE	8.851	01-0108-002-02	2 J-03	115
	KAMINISTIQUEUA RIVER	MIDDLE OF TURNING BASIN	8.047	01-0108-003-02	2 K-03	118
	KAMINISTIQUEUA RIVER	NEAR MOUTH THUNDER BAY	0.000	01-0108-004-02	2 L-03	120

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01002

RIVER BASIN	STREAM	SAMPLE POINT DESCRIPTION	DISTANCE	LOCATION CODE	C.O.M. INDEX	PAGE NO.
KAMINISTIGUIA RIVER	KAMINISTIGUIA RIVER	AT MISSION RIVER JUNCTION	4.023	01-0108-005-02	2 M-03	123
LAKE SUPERIOR	LAKE SUPERIOR	INSIDE EASTERN GAP THUNDER BAY	0.000	01-0000-001-01	2 A-01	1
	LAKE SUPERIOR	OFF MOUTH OF KAMINISTIGUIA RIVER	0.000	01-0000-002-01	2 B-01	3
	LAKE SUPERIOR	NEAR PULP MILL MISSION BAY THUNDER BAY	0.000	01-0000-003-01	2 C-01	5
	LAKE SUPERIOR	NEAR PROV.MILL,EASTERN GAP THUNDER BAY	0.000	01-0000-004-01	2 D-01	7
	LAKE SUPERIOR	NEAR ABITIBI THUNDER BAY PAPER MILL SLIP	0.000	01-0000-005-01	2 E-01	9
	LAKE SUPERIOR	AT ABITIBI THUNDER BAY PAPER MILL DITCH	0.000	01-0000-006-01	2 F-01	11
	LAKE SUPERIOR	3.5 MI.E.OF WELCOME ISL.LIGHTHOUSE	0.000	01-0000-007-01	2 G-01	13
	LAKE SUPERIOR	2.5 KILOMETERS EAST OF MCKELLAR ISLAND	0.000	01-0000-010-01	2 H-01	15
	LAKE SUPERIOR	2 KM EAST OF NORTHERN WOOD PRESERVES	0.000	01-0000-011-01	2 I-01	17
LITTLE PIC RIVER	LITTLE PIC RIVER	AT HIGHWAY 17	1.448	01-0067-001-02	2 I-02	66
MC INTYRE RIVER	MC INTYRE RIVER	AT HAMMOND AVE THUNDER BAY	0.966	01-0106-001-02	2 E-03	94
	MC INTYRE RIVER	HIGHWAY 11 & 17 CITY OF THUNDER BAY	1.931	01-0106-002-02	2 F-03	96
MC KELLAR RIVER	MC KELLAR RIVER	AT 104TH AVE THUNDER BAY	2.414	01-0109-001-02	2 A-04	126
	MC KELLAR RIVER	NEAR MOUTH CITY OF THUNDER BAY	0.161	01-0109-002-02	2 B-04	129
MC VICAR CREEK	MC VICAR CREEK	AT CUMBERLAND STREET THUNDER BAY	0.322	01-0105-001-02	2 D-03	91
MISSION RIVER	MISSION RIVER	NEAR MOUTH	0.322	01-0110-001-02	2 C-04	132
NEEBING RIVER	NEEBING RIVER	HWYS.11&17 WEST OF MAPLEWOOD SIDE ROAD	13.840	01-0107-002-02	2 G-03	99
NEED- MCINTYRE RIVER	NEED-MCINTYRE RIVER	DIVERSION AT 110TH AVE	0.960	01-0107-003-02	2 H-03	102
NIPIGON RIVER	NIPIGON RIVER	AT BRIDGE CAMERON FALLS	18.990	01-0090-001-02	2 L-02	78
	NIPIGON RIVER	AT HIGHWAY 17, NIPIGON	9.656	01-0090-002-02	2 M-02	81
PIC RIVER	BLACK RIVER	AT HIGHWAY 17	12.874	01-0060-002-02	2 L-01	29
	BLACK RIVER	AT HIGHWAY NO.614 SOUTH OF AGONZON	84.327	01-0060-003-02	2 M-01	36
	BLACK RIVER	1 MI.BELOW OUTLET OF NOSE L.ONT.P&P RD.	131.963	01-0060-004-02	2 A-02	39

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RIVER BASIN	STREAM	SAMPLE POINT DESCRIPTION	DISTANCE	LOCATION CODE	C.O.M. INDEX	PAGE NO.
PIC RIVER	BLACK RI'ER	ABOVE MOSE LAKE ON ONT.P&P ROAD	133.250	01-0060-006-02	2 C-02	45
	CEDAR CREEK	HWY 17	3.200	01-0060-010-02	2 G-02	58
	FOX CREEK	AT HIGHWAY NO.614 MANITOWADGE LAKE	136.951	01-0060-005-02	2 B-02	42
	FOX CREEK	AT INFLOW TO MANITOWADGE LAKE	138.239	01-0060-008-02	2 E-02	51
	LITTLE BLACK RIVER	HWY 17	22.720	01-0060-009-02	2 F-02	54
	PIC RIVER	AT HIGHWAY 17	14.806	01-0060-001-02	2 K-01	21
	RUDDER CREEK	3 MI.W.OF HWY.614 ON AMERICAN CAN ROAD	96.742	01-0060-007-02	2 D-02	48
	MABIKOBA CREEK	HWY 17	0.320	01-0060-011-02	2 H-02	62
RAINY RIVER	RAINY RIVER	DOWNSTREAM OF EMO	302.813	19-0001-003-02	3 C-01	141
	RAINY RIVER	UPSTREAM FROM FORT FRANCES TOLL BRIDGE	341.506	19-0001-004-02	3 D-01	143
	RAINY RIVER	DNSTR.FROM CONFLUENCE WITH BAUDETTE R.	225.946	19-0001-009-02	3 H-01	153
	RAINY RIVER	UPSTR.FROM CONFLUENCE WITH BAUDETTE R.	228.521	19-0001-010-02	3 I-01	155
	RAINY RIVER	ABOVE EMO	308.606	19-0001-011-02	3 J-01	157
	RAINY RIVER	DOWNSTREAM FROM FORT FRANCES, NORTH	328.297	19-0001-012-02	3 K-01	159
SEVERN RIVER	BIG TROUT LAKE	BIG TROUT LAKE AT TROUT LAKE	52.880	19-0008-007-02	3 A-03	195
	FAHN RIVER	FAHN RIVER BELOW BIG TROUT LAKE	43.680	19-0008-002-02	3 I-02	185
	ROSEBERRY RIVER	ROSEBERRY RIVER ABOVE ROSEBERRY LAKES	68.160	19-0008-003-02	3 J-02	187
	SACHIGO RIVER	SACHIGO RIVER BELOW OUTLET OF SACHIGO LAKE	56.320	19-0008-006-02	3 M-02	193
	SANDY LAKE	SANDY LAKE AT SANDY LAKE	94.080	19-0008-008-02	3 B-03	197
	SEVERN RIVER	SEVERN RIVER AT OUTLET OF MUSKRAT DAM LAKE	73.600	19-0008-001-02	3 H-02	183
	SEVERN RIVER	SEVERN RIVER BELOW OUTLET OF DEER LAKE	119.680	19-0008-004-02	3 K-02	189
	WINDIGO RIVER	WINDIGO RIVER ABOVE MUSKRAT DAM LAKE	82.880	19-0008-005-02	3 L-02	191

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WHITE RIVER	WHITE RIVER	AT HIGHWAY 17	77.246	01-0057-001-02	2 J-01	19
WINISK RIVER	ASHEWEIG RIVER	ASHEWEIG RIVER AT STRAIGHT LAKE	30.720	19-0018-002-02	3 C-03	199
	PIPESTONE RIVER	PIPESTONE RIVER AT KARL LAKE	89.920	19-0018-003-02	3 D-03	201
WINNIPEG RIVER	WINNIPEG RIVER	AT FIRST CPR BR. WEST OF MAIN ST. KENORA	94.949	19-0001-001-02	3 A-01	135
	WINNIPEG RIVER	NORTH-WEST OF OLD FORT ISLAND	92.213	19-0001-002-02	3 B-01	138



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